

Leveraging Faculty and Peer Leaders
To Promote Commuter Student Co-curricular Engagement:

A Collegiate Retention Intervention Study

by

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ABSTRACT

It is commonly accepted that undergraduate degree attainment rates must improve if postsecondary educational institutions are to meet macroeconomic demands. Involvement in co-curricular activities, such as student clubs and organizations, has been shown to increase students' satisfaction with their college experience and the rates by which they might persist. Yet, strategies that college administrators, faculties, and peer leaders may employ to effectively promote co-curricular engagement opportunities to students are not well developed. In turn, I created the Sky Leaders program, a retention-focused intervention designed to promote commuter student involvement in academically-purposeful activities via faculty- and peer-lead mentoring experiences.

Working from an interpretivist research paradigm, this quasi-experimental mixed methods action research study was intended to measure the intervention's impact on participants' re-enrollment and reported engagement rates, as well as the effectiveness of its conceptual and logistical aspects. I used enrollment, survey, interview, observation, and focus group data collection instruments to accommodate an integrated data procurement process, which allowed for the consideration of several perspectives related to the same research questions.

I analyzed all of the quantitative data captured from the enrollment and survey instruments using descriptive and inferential statistics to explore statistically and practically significant differences between participant groups. As a result, I identified one significant finding that had a perceived positive effect. Expressly, I found the difference between treatment and control participants'

reported levels of engagement within co-curricular activities to be statistically and practically significant.

Additionally, consistent with Glaser and Strauss' grounded theory approach, I employed open, axial, and selective coding procedures to analyze all of the qualitative data obtained via open-ended survey items, as well as interview, observation, and focus group instruments. After I reviewed and examined the qualitative data corpus, I constructed six themes reflective of the participants' programmatic experiences as well as conceptual and logistical features of the intervention. In doing so, I found that faculty, staff, and peer leaders may efficaciously serve in specific mentoring roles to promote co-curricular engagement opportunities and advance students' institutional academic and social integration, thereby effectively curbing their potential college departure decisions, which often arise out of mal-integrative experiences.

DEDICATION

I dedicate this dissertation to Megan, my loving and intelligent wife, who simultaneously encouraged and tolerated me through countless weekends of writing. My work is also dedicated to George and Joanne Sebold, my caring and talented parents, as well as my cherished grandparents—especially Norman Westerfeld, who celebrated his 92nd birthday on February 19th, 2011. This study is also dedicated to Dr. Robert Gryder, my gracious major professor, who has attentively mentored me throughout my entire academic and professional career at Arizona State University.

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Chapter 1

INTRODUCTION

As an administrator within Arizona State University's (ASU) College of Nursing and Health Innovation, I am responsible for developing strategies to help the college recruit and retain students. The college, which is situated on ASU's Downtown Phoenix campus in metropolitan Phoenix, Arizona, regularly admits about 2,000 qualified prospective first-year undergraduate student applicants each fall. On average, roughly 30% of these admitted applicants actually begin their college careers at ASU (Arizona State University Office of Institutional Analysis, 2010). The ensuing challenge of retaining these students as they progress through their baccalaureate programs of study toward graduation then begins.

In approximate alignment with national averages, ASU and its College of Nursing and Health Innovation report that approximately 33% of its undergraduate students attain bachelor's degrees within four years, and 60% of its students graduate within six years of beginning their undergraduate degree programs (Arizona State University Office of Institutional Analysis, 2010; Devarics & Roach, 2000; Hoachlander, Sikora, Horn, & Carroll, 2003; Knapp, Reid, & Whitmore, 2006; Leonhard, 2009). Based on these national and local data, educational researchers (Astin, 1985; Golden & Katz, 2008; Kuh, 2005a; Milem & Berger, 1999; Pascarella & Terenzini, 2005) agree that undergraduate degree attainment rates must improve if postsecondary educational institutions are to meet the needs of the nation and the world.

The pressure to address this national collegiate attrition challenge has led many college administrators to pose the following question: Why do approximately half of the country's undergraduate students who begin bachelor's degree programs depart before earning a diploma? Researchers (e.g., Hossler & Bean, 1990; Swail, Redd, & Perna, 2003; Tinto, 1993) have found that students' decisions to depart college often arise out of negative or mal-integrative experiences within the institution's academic or social systems. However, it is important to realize that the reasons for student attrition are multifaceted and not easily attributed to a narrow set of explanatory causes (Braxton, Hirschy, & McClendon, 2004; Harper & Quayle, 2009). In order to effectively comprehend these factors and other retention-oriented concepts, I have provided the definitions of several key terms that will be used throughout this report (see Appendix A).

Regardless of the inherent complexity associated with student departure decisions, researchers continue to demonstrate that students who are actively engaged in educationally purposeful activities, both inside and outside of the classroom, are more likely than their disengaged peers to persist toward graduation (Astin, 1993; Hossler & Bean, 1990; Kuh, Cambridge, Leegwater, & Bridges, 2005; Laden, Matranga, & Peltier, 1999; Milem & Berger, 1999; Pascarella & Terenzini, 2005; Shaw-Sullivan, Braxton, & Milem, 2000; Tinto, 1993, 2000). As a result, many colleges and universities, including ASU and its College of Nursing and Health Innovation, have increasingly allocated resources toward the implementation of academically purposeful activities in which students may engage.

Once academically purposeful engagement enterprises (e.g., student councils or academically-oriented student organizations) are established, college officials often struggle to effectively promote these co-curricular ventures to the appropriate student population(s) (Kuh, 2005b). In fact, Kuh asserts that student advocates oftentimes guess at how to best present these opportunities to their student beneficiaries. For example, collegiate leaders might establish a marketing mix to include high-tech (e.g., mass emailing, social networking, blogging, and micro-blogging) and high-touch (e.g., flyer distribution and information tabling sessions) promotional methods. Yet, it seems these traditional and emerging promotional strategies often yield unsatisfactory student engagement rates (J. Helm, personal communication, April 1, 2008). Specifically, an ASU administrator recently lamented that an email invitation designed to promote a college-sponsored co-curricular event garnered a response from only 2.5% of 1,200 commuter and resident student recipients (C. Thatcher, personal communication, March 15, 2008). That said, student engagement researchers (Harper & Quaye, 2009; Kuh, 2005b; Sax & Astin, 1998; Sebold, 2008) contend that collegiate retention-minded administrators should rigorously involve faculty and peer leaders, who may be two of the most influential promoters of co-curricular activities, in their engagement marketing efforts.

For this study I targeted the college's commuter student population rather than all—or an alternate subset—of the first-time, first-year students due to the fact that commuter students tend to less naturally integrate into the campus community by virtue of their off-campus living status (Tinto, 1997, 2000).

Approximately 30% of the college's first-time, first-year students live off campus or commute (Arizona State University Office of Institutional Analysis, 2010). Noel, et al., (1985) assert that commuting students are at particular risk for attrition due to the fact that they have been found to exhibit a lessened commitment to the institution. Additionally, Astin, et al., (2001) found that commuting negatively impacts students' degree attainment rates. As such, I decided not to focus the study on other potential "at-risk" first-time, first-year student subpopulations including the 30% of freshmen who entered ASU from outside of the state or country, the 45% of ASU freshmen who took on debt to finance their education, the 23% of freshmen who entered ASU with below a 3.0 high school grade point average, or the 35% of freshmen who identified themselves as belonging to a racial or ethnic minority group. Instead, the goal of this action research study was to create an innovative retention-focused intervention that aimed to effectively promote co-curricular engagement opportunities, such as college-affiliated student clubs or councils, to a sample of the college's freshman commuter student population. The goal was also to measure the intervention's effects, largely in terms of ASU's College of Nursing and Health Innovation first-year commuter students' re-enrollment rates during the 2010-2011 academic year. The study was guided by several relevant pieces of scholarly literature and ultimately framed by Tinto's (1990, 1993) model of institutional departure and his corresponding principles of effective retention program implementation.

Chapter 2

LITERATURE REVIEW

President Barack Obama addressed our nation's low college degree attainment rates and associated economic tribulations during a speech delivered in 2009. The President challenged the country's post-secondary education leaders to produce the highest proportion of college graduates in the world by the year 2020 (Obama, 2009). The President's charge underscores our nation's collegiate retention problem with which educational leaders and researchers have been grappling over the past several decades (Laden, Matranga, & Peltier, 1999; Milem & Berger, 1999; Skipper & Argo, 2003; Upcraft, 1990).

Among the findings that retention-minded researchers (Astin, 1985; Kuh, 2005a; Pascarella & Terenzini, 2005; Tinto, 1993, 2000) have since shared with collegiate policy-makers, several themes were applicable to this study. Specifically, students who engage in educationally purposeful activities outside of the formal classroom setting might realize gains in cognitive and intellectual skill development (Anaya, 1996; Magolda, 1992); college adjustment (Cabrera, Nora, Terenzini, Pascarella & Hagedorn, 1999; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006); moral and ethical development (Evans, 2010; Rest, 1993); practical competence and skills transferability (Kuh, 1991, 1995); and the accrual of social capital, psychological development, and self identity (Evans, 2010; Harper, 2004, 2008; Harper & Quaye, 2009; Torres, Hamilton, & Cooper, 2003). Moreover, student involvement in co-curricular activities, such as participation in student organizations (Pascarella & Terenzini, 2005), living-learning communities

(Stassen, 2003; Tinto, 1997), service learning experiences (Sax & Astin, 1998), undergraduate research (Gregerman, Hathaway, & Nagda, 1998), and internships (DiLorenzo-Aiss & Mathisen, 1996) has been shown to increase students' satisfaction with their college experience, academic success, and the rates by which they might persist. Although all of these benefits are substantial, the nexus between student engagement and persistence is pertinent to both the national degree attainment directive issued by President Obama and to this study.

As stated, student involvement in co-curricular or social activities has been shown to, among other outcomes, increase the likelihood of persistence. However, it is important to note that these experiences might also simultaneously decrease the likelihood of intellectual development and academic success (Kuh, 1991; Laden, Matranga, & Peltier, 1999; Skipper & Argo, 2003) oftentimes via precarious social interactions or unhealthy behaviors. Therefore, Upcraft (1990) argues that institutions must offer a combination of intellectually rich, socially positive, and personally engaging formal and informal campus activities in order to yield the greatest retention results.

Additionally, many researchers contend that other substantial factors, such as financial impediments (Cabrera, 1990; Cabrera, Nora, Terenzini, Pascarella & Hagedorn, 1999; Volkwein, Cabrera, Szelest, & Napierski-Prancl, 1998); academic under-preparedness (Ryan, Dickson, Koefer, & Michael, 2010); and racial, ethnic, or cultural disparities (Bean, 1985; Cabrera, 2008; Cabrera & Nora, 1996; Harper & Quaye, 2009), may negatively impact student persistence longitudinally. Furthermore, due to the fact that female students comprised

approximately 70% of the 2010 freshman class within ASU's College of Nursing and Health Innovation, I must note Bean's (1980) assertion that gender may also impact collegiate attrition rates. Bean and other researchers (e.g., Sax, 2008) found that female persistence decisions are influenced by, among other factors, their perceived quality of the college's academic programs; whereas males tend to persist at a higher rate when they feel valued by the institution. Moreover, it is entirely possible for students, regardless of their gender, socioeconomic status, or the like, to successfully persist and graduate without engaging in *any* co-curricular activities throughout their entire collegiate careers. Yet despite these documented longitudinal attrition triggers and variances, Tinto (2007) and others (Kuh, 2007; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006) uniformly assert that the creation and effective promotion of formal and informal co-curricular student engagement activities will positively impact student retention rates.

Concerning the implementation of co-curricular, retention-targeted programming, a decades-old superficial separation has unfortunately existed between faculty and retention-focused student affairs professionals as the former were thought to be responsible for students' classroom learning and the latter were expected to manage students' involvement in extra and co-curricular activities (Harper and Quay, 2009; Roof, 2010). As a result, few efforts have been made to connect extra and co-curricular activities to classroom goals (Kuh, 2007; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006). Furthermore, college faculties have historically paid little attention and given minimal support to extra and co-curricular activities despite the fact that these pursuits have been shown to

increase students' rates of integration and persistence (Boyer, 1987; Kuh, 1991; Tinto, 1993). Retention-minded collegiate scholars (e.g., Harper and Quay, 2009), along with a number of ASU administrators, faculty, and staff members, are now beginning to reject this false dichotomy and show how educators in both areas are responsible for fostering student persistence by collaboratively promoting co-curricular, academically-purposeful engagement opportunities (M. Crow, personal communication, January 2, 2010). However, a gap in the literature exists regarding the specific roles that faculty and staff members should play when attempting to effectively promote co-curricular engagement opportunities to their students.

In addition to faculty and staff synergistically encouraging co-curricular student engagement, researchers (Milem & Berger, 1999; Sanchez, Bauer, & Paronto, 2006) have also illustrated how peer leaders might also positively influence students' decisions related to persistence and degree completion. However, strategies pertaining to the promotion of co-curricular engagement opportunities by peer leaders are, unfortunately, not thoroughly examined within the existing scholarly literature. Research that focuses on the promotion of co-curricular engagement opportunities through faculty, staff, and peer leader mentoring experiences is also lacking. While all of the aforementioned pieces and gaps in the literature are relevant to, and supportive of, my intervention, I ultimately utilized Tinto's (1990) seven principles of effective retention program implementation to guide my intervention actions.

Chapter 3

CONCEPTUAL FRAMEWORK

Constructs of Tinto's (1990, 1993) longitudinal model of institutional departure from institutions of higher education and his corresponding principles of effective retention program implementation have provided the conceptual framework for my intervention and corresponding investigation. Exploring Tinto's longitudinal model of departure from institutions of higher education (see Appendix B) is an important first step toward developing an effective retention intervention.

Broadly understood, Tinto (1993) posits that individual departure decisions arise from interactions between students and other members of academic and social systems within institutions. Students enter institutions with certain attributes such as financial resources, skills, prior educational experiences, and dispositions. Students' experiences within the academic and social systems of the institution, as shaped by intellectual and personal integration into those systems, then continually help to modify their institutional intentions and commitments. Positive or integrative experiences reinforce persistence given their impact upon students' heightened commitment toward the institution and graduation. In tandem, negative or mal-integrative experiences serve to weaken students' collegiate intentions and commitments and thereby enhance the likelihood of leaving.

Tinto (1993) asserts that pre-entry attributes have a direct impact upon college departure decisions, largely due to their impact on students' collegiate

academic performance and social integration. Tinto's model also considers students' goals and commitments via their selection of an academic major, their career aspirations, and how dedicated they are to reaching their academic and professional goals by remaining at their chosen institution. Additionally, Tinto posits that external commitments such as family and financial obligations might interfere with students' commitment to their goals and persistence decisions.

He further argues that institutional experiences arising out of formal and informal academic and social interactions that students have with faculty, staff, and other students are directly related to students' decisions to stay or leave. Likewise, integration, vis-à-vis the summation of students' interactions and experiences between and within the academic and social systems of the institution, may also greatly impact departure decisions. In addition, Tinto (1993) argues that conflicts arising during the reexamination of collegiate and professional objectives may trigger a lessened commitment toward goal attainment and, as a result, lead to attrition. Students' decisions about degree completion are, in turn, largely based upon the level of support they have received from both the academic and social communities in which they participate.

Upon conducting a comparative analysis of a number of successful collegiate retention programs, Tinto (1993) and other researchers (Astin, 1985, 1993; Bean, 1980; Bean & Metzner, 1985; Braxton, Hirschy, & McClendon, 2004; Milem & Berger, 1999; Pascarella & Terenzini, 2005) discovered that most initiatives share several important attributes. Specifically, successful retention efforts uniformly feature an enduring commitment to student welfare; a broader

commitment to the education, not mere retention, of all students; and an emphasis upon the importance of the institution's intellectual and social communities. Tinto explains that if there is a "secret recipe" for successful retention programming, it lies in understanding these principles and deciding how to best apply them to the complex problem of retaining unique student populations in varying institutional settings.

Indeed, the range of specific types of retention program implementation strategies is quite broad. Retention strategies that prove to be effective in one setting may not prove equally effective in another (Tierney, 1992). Expressly, McCubbin (2003) asserts that although Tinto's model of persistence has been widely accepted for over thirty years, it is far from universally embraced. Specifically, McCubbin and other researchers (Duquette, 2000; Rovai, 2002; Torres, Hamilton, & Cooper, 2003) contend that Tinto's model does not generalize well beyond "traditional" college students, and thus warn that the model should be cautiously used to guide the implementation of student engagement and persistence-promotion interventions for non-traditional (commuters, distance-learners, adult students, disabled students, etc.) populations.

Despite these legitimate concerns regarding the applicability of Tinto's model, retention researchers (Braxton, Hirschy, & McClendon, 2004; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; Tinto, 2007) consistently agree that programs designed to promote both traditional and non-traditional student engagement and persistence rates should: (1) be frontloaded to accommodate primarily first-year students; (2) be committed to long-term programmatic

development; (3) leverage resources and incentives for college-wide participation; (4) provide adequate training for faculty, staff, and student leaders; (5) allow for bottom-up program management; (6) promote campus-wide collaboration; and (7) be committed to continual program assessment and improvement. These seven action principles have guided the creation of the retention intervention that I developed for a sample of first-year commuter students enrolled within Arizona State University's College of Nursing and Health Innovation during the fall 2010 semester.

Chapter 4

INTERVENTION

The intervention, which I titled *the Sky Leaders program*, was created in partnership with Arizona State University's College of Nursing and Health Innovation. The college's liberating motto—*Dream, Discover, Deliver*—inspired the intervention's celestial namesake. The Sky Leaders program featured faculty, staff, and peer leader mentoring experiences aimed at promoting co-curricular engagement opportunities to first-year commuter students. The program consisted of seven conceptually-guided phases that were carried out during the fall term of 2010.

First, as framed by Tinto's (1990) principles, I recruited four faculty members who taught first-year major-specific courses within ASU's College of Nursing and Health Innovation to serve as Sky Leaders program faculty mentors (see Appendix C). I also recruited four students to serve as peer leader mentors within the program (see Appendix D). These peer leader mentors were targeted based upon their previous or current roles as peer advisors, student leaders, or officials within the college's major-affiliated student organizations. I also enlisted four first-year commuter student participants from each major and assigned them as mentees to each of the four corresponding faculty and peer leader mentoring teams. I also personally participated as the program's director by assisting with the academic and social engagement promotional process within each mentoring team. In sum, each of the four Sky Leaders program teams comprised one faculty

mentor, one peer leader mentor, one staff program director (me), and four first-year commuter student mentees.

Second, in alignment with Tinto's (1990) principles, I established a sustainable approach to the intervention's development process. I procured support from the college's administrators by verifying their long-term commitment to building enduring intellectual and social communities within the college. I developed a \$300.00 budget (see Appendix E) and had it approved by the college's executive leadership team. I used these funds to purchase items, such as Sky Leaders t-shirts (see Appendix F) and refreshments, which enhanced the program's mentoring experiences and engagement strategies by fostering a sense of community and belonging.

Third, I leveraged resources and incentives, such as ASU's *Serving University Needs (SUN) Awards* (see Appendix G), to encourage college-wide program participation. After administrators' programmatic support was confirmed, I requested that they endorse Sky Leaders program participation among the college's faculty and peer leader ranks. I was also able to procure complimentary campus dining meal plans for all eight of the Sky Leader mentors.

Fourth, I provided training for the faculty and peer leader mentors. I, along with several other key college administrators, required the mentors to participate in a *Sky Leaders Mentor Training Retreat* prior to the start of fall 2010 classes. The training curriculum (see Appendix H) introduced the mentors to Tinto's (1990, 1993) longitudinal model of institutional departure and his corresponding principles of effective retention programming. The faculty and student mentors

also learned how to respond to mentee questions or concerns that were forecasted to arise during the Sky Leaders team meetings.

Fifth, I facilitated bottom-up management of the intervention. The faculty and student mentors demonstrated their understanding of the program objectives via a group discussion at the conclusion of the *Sky Leaders Mentor Training Retreat*. However, in an effort to establish a foundation on which the mentors could creatively build momentum without stringent oversight, I asked them to implement a minimum level of activity (see Appendix I). Specifically, I asked each faculty mentor to host at least two Sky Leaders meetings with their assigned student mentee participants within the first five weeks of fall semester classes. The faculty-lead Sky Leaders meetings took place outside of the formal classroom setting at a time (e.g., before or after the faculty mentor's course) and location (e.g., a local coffeehouse) determined by the team. Faculty mentors were encouraged to collaboratively select the best team meeting days, times, and locations with their mentees by the end of the first week of the fall semester. During the faculty-lead Sky Leaders meetings, teams were expected to follow the discussion protocol (see Appendix J), which was also aligned with Tinto's (1993) model.

Correspondingly, I asked the Sky Leaders program peer leader mentors to host at least three Sky Leaders meetings with their assigned student mentees within the first ten weeks of fall semester classes. The student mentors were asked to discuss topics mirroring those addressed by the faculty mentors during their Sky Leaders meetings (see Appendix J). The Sky Leaders meetings hosted by the

peer leaders were arranged using the same scheduling procedure as the faculty-lead meetings. In my role as the program director, I strove to attend at least ten of the 20 (five meetings for each of the four teams) faculty and student-lead Sky Leaders meetings.

Sixth, I orchestrated a campus-wide collaborative approach to the intervention. Given that the Sky Leaders faculty and peer leader mentors were asked to promote students' involvement in co-curricular engagement activities during the fall 2010 term, it was imperative that they were aware of a variety of transdisciplinary opportunities across the campus, community, and university. In an effort to bolster positive, integrative student experiences, I operated as a boundary-broker (Wenger, 1998) between the Sky Leaders program mentors and ancillary co-curricular engagement officers by passing along campus engagement opportunity announcements via email as well as via printed flyers during team meetings.

Last, I conducted an intervention assessment with an eye toward program improvement by inviting all Sky Leaders program mentors and mentees to a *Final Fall Fiesta* assembly during the twelfth week of the fall 2010 semester. The *Final Fall Fiesta* gathering featured a Sky Leaders program recognition ceremony, which was intended to indoctrinate the mentees into the academic and social fabric of the college and campus community. Certificates of recognition (see Appendix K) were also distributed during the ceremony. The assembly also provided an opportunity for the Sky Leaders' mentors and mentees to candidly discuss their prior mentoring experiences and consequent co-curricular activity

involvement, thus affording me an opportunity to collect qualitative data related to several of my research questions.

Chapter 5

RESEARCH QUESTIONS

In conjunction with the planning and execution of the Sky Leaders program, I intended to examine the following research questions related to the mentee (treatment group) and the non-mentee (control group) participants' experiences: (1) Were the mentees perceived to be more likely than the non-mentees to get involved with academically purposeful activities outside of class? (2) Were the mentees perceived to be more likely than the non-mentees to re-enroll in ASU courses during the subsequent spring 2011 academic term? More specifically, as aligned with strategic aspects of Tinto's (1993) model, I sought to determine if the Sky Leaders program (independent variable) had a perceived impact on the participants' attitudes and intentions regarding their (3.1) initial institutional goals and commitments; (3.2) institutional experiences (with an additional emphasis on co-curricular engagement behaviors and satisfaction); (3.3) academic integration; (3.4) social integration; and (3.5) re-enrollment considerations (dependent variables).

Throughout the intervention I also sought to gauge the perceived effectiveness of each of the program's conceptual and logistical components by considering the following questions, as aligned with Tinto's (1990) principles of effective retention: (1) What was the perceived effect of focusing the Sky Leaders program on first-year, first-semester college students? (2) In what ways, if deemed effective, might the Sky Leaders program become sustainable? (3) What was the perceived effect of the *Sky Leaders Mentor Training Retreat*? (4) What

was the perceived effect of the faculty and peer leader-hosted Sky Leaders team meetings? (5) What was the perceived effect of promoting co-curricular engagement via campus-wide collaboration? (6) What was the perceived effect of the *Final Fall Fiesta* assembly?

Chapter 6

METHODOLOGY

Since I intended to make an immediate positive difference within my college—a goal that is particularly appropriate to the action research tradition (Stringer, 1999)—I used a quasi-experimental, mixed methods approach to investigate the perceived effectiveness of the Sky Leaders program. I employed a quasi-experimental design due to the fact that random assignment of participants was not feasible (Fraenkel, & Wallen, 1993). I used mixed methods to accommodate an integrated data collection process, which allowed for the consideration of several perspectives related to the same research questions (Woolley, 2009). Specifically, I utilized enrollment, survey, interview, observation, and focus group measures to gain a more complete understanding of the impact that the Sky Leaders program might have had on first-year commuter students' decisions to get involved with academically purposeful activities, and ultimately re-enroll in classes at ASU during the spring 2011 term. I also used interview, observation, and focus group measures to gauge the effectiveness of the Sky Leaders program's conceptual and logistical components. Prior to discussing details related to my data collection and analysis strategies, however, I must first provide a thorough overview of the participant groups who were involved in this study.

Participants

The Sky Leaders program included four Sky Leaders teams, as stated, each comprising one faculty mentor, one peer leader mentor, four first-year

commuter student mentees, and one staff program director (me). In sum, four faculty mentors, four peer leader mentors, 16 first-year commuter student mentees (the treatment group), and one staff program director participated within the study. Additionally, I recruited 23 first-year commuter students to participate within the study as non-mentees (the control group). As discussed, I targeted commuter student participants due to the fact that several co-curricular engagement and retention-focused programs, such as living-learning communities and residential supplemental instruction opportunities, are already in place for students who live on campus. Therefore, I speculated that the intervention would have the greatest positive impact on the college's first year commuter student population, rather than the first year student population at large.

Mentor participants. Four faculty members and four peer leaders were targeted for the Sky Leaders program and these individuals became the mentor participants group within the study. The mentor participants were stratified as faculty members or peer leaders within the college's Exercise & Wellness, Health Sciences, Nursing, and Nutrition programs. I employed a non-probability purposive sampling strategy (Patton, 1990) to select these individuals. Specifically, I selected and invited (see Appendix C) faculty mentors to participate within the study based upon their status as professors within the college, as well as their demonstrated familiarity with, and support of, co-curricular student engagement initiatives. Similarly, I selected and invited (see Appendix D) peer leader mentors to participate within the study based on their previous or current roles as peer advisors, residential college student leaders, or

officials within the college's major-affiliated student organizations, as well as their demonstrated familiarity with, and support of, co-curricular student engagement opportunities.

Mentee participants (the treatment group). I selected 16 students, stratified as first year commuters majoring in Exercise & Wellness, Health Sciences, Nursing, or Nutrition, for the mentee (treatment) participant group. I selected the mentee participants from four major-affiliated courses that were taught by the aforementioned faculty mentor participants. In doing so, I first identified 139 students who were enrolled within their first year of study at ASU and registered in at least one of the four targeted class sections. Next, by cross-referencing on-campus housing records and emailing ambiguous cases, I determined that 27 of the 139 (19%) students could be confirmed as commuters and another 28 of the 139 (20%) students could be potentially classified as commuters. Unfortunately, only 17 of the 27 (63%) confirmed commuter students' declared majors aligned with the major-affiliated course sections in which they were enrolled. As such, I utilized a non-probability quota sampling strategy (Moser & Stuart, 1953) to invite 16 of the 17 (94%) confirmed commuter students to participate within the treatment group as mentees. Employment of a random sampling strategy was impossible due to the fact that I only narrowly met my quota of four confirmed first year commuter students whose majors aligned with their enrollment in one of the four affiliated Exercise & Wellness, Health Sciences, Nursing, or Nutrition introductory courses. As a result, because these participants were selected per their "extreme" statuses as "conscientious major-

specific course enrollees” and “diligent housing status confirmers,” internal validity may have been confounded by nonequivalence via regression interaction (Smith & Glass, 1987).

At the conclusion of their respective initial class meetings between August 19th and 27th, 2010, 11 of these 16 (69%) targeted students were present and/or 18 years of age or older. The faculty mentor and I then personally invited (see Appendix L) these 11 students, along with 28 (present and/or eligible) of the remaining 44 (64%) confirmed or potential commuter students to complete the pre-survey (see Appendix M). After completing the pre-survey, the faculty mentor and I then invited the 11 confirmed commuter students, along with an additional convenience sample of 5 of the 28 (18%) confirmed or potential commuter students, to participate as mentees within the Sky Leaders program and all 16 (100%) of these students agreed by signing a “consent to participate” form (see Appendix N) and accepting a complimentary Sky Leaders t-shirt and daily planner.

The mentee participants were 75% female and 25% male. They were predominately White (63%), and then Hispanic/Latino (31%), while one mentee chose not to divulge his or her race. Just fewer than 38% of the mentees were first-generation college students. Academically, their mean incoming Arizona Board of Regents (ABOR) grade point average (GPA) was 3.37 and they subsequently posted a mean GPA of 2.93 at ASU during the fall 2010 term. Greater than 80% were in-state residents. The median distance that the mentees traveled from their local residence to ASU’s Downtown Phoenix campus was

approximately 24 miles (see Appendix O). More than 87% of the mentees reported that they were not employed during the semester of study or worked less than the time they devoted to their studies. In accord, approximately 56% of the mentees reported that they were generally not concerned about how they would finance their baccalaureate education.

Non-mentee participants (the control group). I targeted another 39 students, stratified as first year commuters majoring in Exercise & Wellness, Health Sciences, Nursing, or Nutrition, for the non-mentee (control) participant group. They comprised 28 probable commuters, ten confirmed commuters whose majors were not aligned with the discipline-specific class in which they were enrolled, and one confirmed commuter who was not targeted for the treatment group. I selected the non-mentee participants using the same methodology as previously described for the mentee (treatment) participants.

At the conclusion of their respective initial class meetings between August 19th and 27th, 2010, 28 of these 39 (72%) targeted students were present, confirmed commuters, and/or 18 years of age or older. The faculty mentor and I then personally invited (see Appendix L) these 28 students to stay after class to complete the pre-survey (see Appendix M) alongside the targeted mentee participants. As mentioned, five of these 28 (18%) students were consequently convenience-sampled into the mentee participant group. As such, 23 of the 39 (59%) targeted students became members of the non-mentee (control) participant group by virtue of completing the pre-survey.

The non-mentee participants were 91% female and 9% male. They were predominately White (45%), then Hispanic/Latino (33%), Multi-Race (10%), Native American (10%), African-American (1%), and Asian (1%). Just greater than 78% of the mentees were first-generation college students. Academically, their mean incoming ABOR GPA was 3.15 and they later posted a mean GPA of 2.91 at ASU during the fall 2010 term. Just greater than 78% were in-state residents. The median distance that the non-mentees traveled from their local residence to ASU's Downtown Phoenix campus was approximately 16 miles (see Appendix O). Just greater than 78% of the non-mentees reported that they were not employed or worked less than the time they devoted to their studies. In accord, approximately 44% of the non-mentees reported that they were generally not concerned about how they would finance their baccalaureate education.

Comparison of the treatment and control participants. I utilized Pearson's chi-square tests of independence (Plackett, 1985) to verify that the mentee participants were not significantly different from the non-mentee participants in regard to several strategic factors. Specifically, gender differences between the treatment and control groups were not statistically significant at the $p \leq 0.05$ level ($X^2(1, N = 39) = 1.93, p = 0.17$) (see Appendix P). Additionally, racial differences between the treatment and control groups were insignificant at the $p \leq 0.05$ level ($X^2(6, N = 39) = 6.28, p = 0.40$) (see Appendix Q). Furthermore, the number of treatment participants whose parents did not attend college was not statistically different from the parental educational backgrounds of the control participants at the $p \leq 0.05$ level ($X^2(1, N = 39) = 6.11, p = 0.13$) (see Appendix

R). Moreover, the number of treatment participants who were concerned about financing their college education was not statistically different from the control participants' level of financial concern at the $p \leq 0.05$ level ($X^2(1, N = 39) = 0.62, p = 0.43$) (see Appendix S). The median distance (in miles) that the treatment and control groups traveled to campus was not statistically significantly different at the $p \leq 0.05$ level ($X^2(34, N = 39) = 36.93, p = 0.34$) (see Appendix T). In terms of academic prowess, the self-reported high school academic performance differences between the treatment and control groups were insignificant at the $p \leq 0.05$ level ($X^2(2, N = 39) = 4.83, p = 0.09$) (see Appendix U). Likewise, the differences between the treatment and control groups mean incoming ABOR GPA's were insignificant at the $p \leq 0.05$ level ($X^2(33, N = 39) = 34.87, p = 0.38$) (see Appendix V). Finally, the difference between their mean GPA's posted at ASU during the fall 2010 term were not significant at the $p \leq 0.05$ level ($X^2(33, N = 39) = 36.25, p = 0.32$) (see Appendix W).

In sum, although both participant groups were not randomly sampled, the aforementioned data confirm that the treatment and control subjects were statistically similar in terms of gender, race, parental education, financial confidence, median distance to campus, reported prior academic performance, mean incoming ABOR GPA, and mean fall 2010 ASU GPA. This indicates that the null hypothesis (Fisher, 1966) was true: differences between the treatment and control participants, given the demographic data available, collected, and analyzed, were indeed random. However, again, it is possible that participant

nonequivalence by regression interaction (Smith & Glass, 1987) may have compromised the internal validity of the study.

Data Collection and Analyses

I used enrollment, survey, interview, observation, and focus group instruments to gain a more robust understanding of how the Sky Leaders program may have impacted first year commuter students' decisions to get involved with academically purposeful activities. I also used these same tools to determine whether these students intended to re-enroll in classes at ASU during the spring 2011 term and why, as well as to gauge the perceived effectiveness of the Sky Leaders program. These specific data collection techniques were selected for both conceptual and logistical reasons. Conceptually, I intended to collect evidence from a variety of sources in a variety of ways, which enabled me to triangulate data to support my findings and assertions. Logistically, the aforementioned data collection techniques were both appropriate for and executable within the relatively tight timetable allotted for this study. I also considered how the trustworthiness of my data collection instruments and subsequent data analysis strategies might be maximized. Lastly, I considered the implications of my role as a participant-observer within this study.

Enrollment instrument. Aligned with the student status and enrollment components of Tinto's (1993) departure model, I used ASU's Online Administrative & Student Information System (OASIS) production of Oracle's (2010) PeopleSoft application as well as My Reports, ASU's implementation of Oracle's Business Intelligence + Data Warehouse application, to access course

registration data, housing statuses, and enrollment and re-enrollment statuses of participants in both the mentee (treatment) and non-mentee (control) participant groups prior to and after the intervention. I piloted this process using a set of similar first-year students during the spring 2010 term.

Survey instruments. To evaluate my research questions related to students' initial institutional goals and commitments, institutional experiences (with an emphasis on co-curricular engagement behaviors and satisfaction), academic and social integration, and re-enrollment considerations as aligned with several strategic aspects of Tinto's (1993) longitudinal model of institutional departure from institutions of higher education, I used three paper and pencil survey instruments: (1) treatment group (mentee) and control group (non-mentee) pre-survey (see Appendix M); (2) treatment group (mentee) post-survey (see Appendix X); (3) control group (non-mentee) post-survey (see Appendix Y). Both pre-survey instruments consisted of 32 Likert-type items organized by construct, along with ten additional demographic/pre-entry attribute questions. Both post-survey instruments consisted of 36 Likert-type items also organized by construct, as well as three open-ended, free response items and four "yes/no" items. Furthermore, the treatment group (mentee) post-survey included three additional open-ended, free response items. I piloted all four paper and pencil-style survey instruments using a set of similar first-year students during the spring 2010 term and revised them accordingly.

As discussed, I administered the pre-survey instruments to 16 mentee participants and 23 non-mentee participants during the first or second class

meeting of each of the four faculty mentors' targeted courses. I administered both the treatment and control group post-survey instruments to the mentee and non-mentee participants, respectively, during the tenth class meeting of each of the four faculty mentors' targeted courses or via scheduled or impromptu meetings on campus. Survey response data were then entered into an Excel spreadsheet by an undergraduate peer advisor and a clerical staff member under my direction. I imported the data into the 17th version of IBM's Statistical Package for the Social Sciences (SPSS, 2009) and performed a data entry error check on four (10%) randomly-selected cases. Although no data entry errors were found, it was clear that many participants did not respond to all of the survey items. In turn, I inputted the missing data using the SPSS *transform missing values* function, which replaced fifty (0.02%) missing Likert-type values with the mean of all corresponding item values for similar respondents. I determined that replacing missing values within both the pre- and post-surveys was better than eliminating incomplete cases. Eliminating cases would have reduced the statistical power of analysis due to the control and treatment groups' small sample sizes (A. Beardsley, personal communication, December 23, 2010).

Thereafter, I performed reliability analyses (Meeker & Escobar, 1998) on each of the constructs within the survey instruments to determine the Alpha Coefficient, which is commonly known as Cronbach's (1951) alpha. The Alpha Coefficient test was used to determine if the items included within each of the six constructs mapped onto the goals, as organized into constructs, of the Sky Leaders program. As previously indicated, these six constructs comprised: (1) students'

initial and subsequent institutional goals and commitments; (2) students' institutional experiences (with an emphasis on co-curricular engagement behaviors and satisfaction); (3) students' academic integration; (4) students' social integration; (5) students' re-enrollment considerations, and (6) program conceptualization and logistics. An alpha level of 0.70 is a commonly used cut-score (Nunnally, 1978) and was used here to determine if the instrument yielded reliable results (see Table 1).

Table 1

Survey Instrument Coefficient-Alpha Estimates of Internal-Consistency Reliability

Construct	Affiliated Items	Coefficient Alpha Estimate of Reliability Pre	Coefficient Alpha Estimate of Reliability Post
Goals and commitments	Items 1-8 ^a	0.53	0.78
Institutional Experiences	Items 9-14 ^a (15-17 ^{b, c})	0.84	0.84
Engagement Behaviors	Items 18, 20, 22, 24 ^c	d	e
Engagement Satisfaction	Items 19, 21, 23, 25 ^a	d	e
Academic Integration	Items 26-31 ^a	0.71	0.71
Social Integration	Items 32-37 ^a	0.70	0.77
Re-enrollment considerations	Items 38-43 ^a	0.72	0.77
Program conceptualization and logistics	Items 44-46 ^{b, f}	d	b, f

^a These items measured participants' attitudes and intentions.

^b These items were open ended, free response questions.

^c These items measured participants' behaviors.

^d These items were only included on the post-survey.

^e These items were dichotomous or based upon dichotomous items.

^f These items were only asked to the mentee (treatment) participant group.

According to Hill & Lewicki (2006), a measurement is reliable if it reflects mostly true score, relative to the error. For example, an item such as "I do not plan on transferring to another college or university at some point" within the *goals and commitments* construct was apt to provide an unreliable measurement because there may have been ample individual differences concerning transfer plans among respondents. In addition, Popham (2010) contends that items that include "do not," or similar language, may negatively impact reliability due to the fact that respondents often have difficulty cognitively processing negative statements. As such, the proportion of true score for actual goals and commitments to that item may have been relatively small. In accord, the *goals and commitments* construct may have had the lowest alpha level = 0.53 (pre) because it was designed to measure subjects' goals *and* commitments in regard to *both* their chosen institution (ASU) *and* their chosen major. These asynchronous items along with the relatively untested constructs and items undoubtedly negatively impacted reliability. The highest alpha levels = 0.84 (pre and post) for the *institutional experiences* construct may have most likely been attributed to more clearly written questions. Moreover, the theme of becoming involved in co-curricular activities may have been more strongly emphasized; therefore, the concept was better understood by the subjects and yielded more reliable results.

Next, I performed factor analyses (Grimm & Yarnold, 1995) on each of the aforesaid constructs within my survey instruments to identify and assess

correlations or common relationships that may have existed among individual items within each scale (Gorsuch, 1983). I utilized Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy and Bartlett's tests of sphericity to determine whether items in each of my original constructs could be split and reclassified into new independent constructs, or factors (Stevens, 2002). According to Grimm and Yarnold, KMO values greater than 0.6 indicate that a correlational matrix has sufficient structure to result in a factorable solution. Of my five original constructs that were eligible for factor analysis, three yielded a significant Bartlett's test of sphericity and also posted KMO values greater than 0.6. However, Stevens asserts that factorable items must account for at least 16% of the total variance in order to "load," or be sufficiently correlated with a new independent factor. In turn, I discovered that the three aforementioned constructs that posted KMO values greater than 0.6 did not include items that would have adequately loaded onto new factors. I further clarified the three eligible construct patterns via the use of scree plots (Shaw, 2003), which illustrate the relationship between eigenvalues (measures of variance) and potential numbers of unique factors. In doing so, I decided not to split and reclassify my original constructs into new independent factors due to load inadequacy and an underrepresentation of common scales within the potential factors (C. M. Wharton, personal communication, April 16, 2011).

Finally, I analyzed all of the quantitative data captured from the survey instruments using descriptive and inferential statistics to explore statistically and practically significant differences between mentee (treatment group) and non-

mentee (control group) students. I conducted these analyses to help determine if the Sky Leaders mentees were more positively impacted by this intervention given its goals. Specifically, I conducted paired samples dependent t-tests as well as independent samples t-tests (Fadem, 2009) to determine if any significant differences between responses provided by the treatment and control participants on the pre- and post-surveys could be attributed to the Sky Leaders program intervention, vis-à-vis each of the survey instrument's constructs. Given that my treatment and control group sample sizes (N = 16 and 23, respectively) were relatively small, I also calculated descriptive effect size statistics (Ellis, 2010) using an on-line calculator (Wilson, 2001) in an effort to measure the strength of the relationship between the pre- and post-survey mean scores, standard deviations, and practical significance levels. Pre- and post-survey data were also analyzed by individual item to determine which had the highest and lowest mean and standard deviation differences per the treatment participants' responses.

In addition to the quantitative data from the surveys, qualitative data were also obtained via three open-ended, free response questions asked within both post-surveys, as well as from three additional open-ended, free response questions within the treatment group (mentee) post-survey. I entered these qualitative data into an Excel (Microsoft Office, 2007) spreadsheet and grouped categories and concept patterns into summative first-level (open) codes (Creswell & Clark, 2007). Consistent with Glaser and Strauss' (1967) grounded theory approach, which strives to inductively derive theory from representative phenomena, I also coded qualitative data concepts intensively and concertedly around single

categories constructed during the open coding process. In doing so, I built a dense texture of relationships around the “axis” of each category, or phenomenon, on which I focused (Strauss & Corbin, 1998). In constructing these cumulative, second-level (axial) codes, I developed categories and subcategories to form more precise and complete explanations regarding these affiliated phenomena (Glaser, 1992).

Interview instruments. I used two interview instruments to further investigate my research questions. The mentor and the mentee interview instrument consisted of nine and 11 semi-structured questions, respectively, which were aligned with several aspects of Tinto’s (1990, 1993) longitudinal model as well as his corresponding principles of effective retention program implementation (see Appendices Z and AA, respectively). I piloted these interview instruments using a set of similar first-year students, faculty members, and peer leaders during the spring 2010 term and revised them accordingly. Interviews were not conducted with the non-mentee (control) participant group due to that fact that they did not have any insight into the perceived effects of the Sky Leaders program.

For official purposes, I scheduled mutually convenient interview times with all eight (100%) of the Sky Leaders program’s faculty and peer leader mentor participants, as well as 15 of the 16 (94%) student mentee participants (treatment group) between the seventh and tenth weeks of the fall 2010 term. One mentee participant withdrew from all fall courses and did not re-enroll at ASU during the spring 2011 term. I attempted to contact the mentee numerous times

via phone, email, text messaging, and a popular social networking web site, but was ultimately unsuccessful. However, the 23 participants who were interviewed provided a relatively rapid and complete description of what they perceived was occurring within their respective participant groups (Tremblay, 1957). As such, I only missed one opportunity to employ my mentee interview instrument as a means of identifying the reasons why the aforementioned participant left the intervention early.

Nonetheless, I conducted and recorded all 23 interviews, which lasted approximately 30 minutes each. I hired an independent clerical professional to transcribe all of the interview audio recordings. I then entered these qualitative data into an Excel spreadsheet and I, along with two of my doctoral candidate peers, then independently constructed summative first-level (open) codes (Creswell & Clark, 2007). In conformity with the aforementioned grounded theory approach, we identified, labeled, categorized, and related together variables related to the phenomena under study. I then independently dimensionalized these data by organizing the codes along a continuum within a range of possible values or related responses (Strauss & Corbin, 1998). Next, I utilized what Strauss and Corbin refer to as a “coding paradigm,” which is an axial coding procedure that aims to identify causal relationships between open coded categories. In doing so, I sought to make explicit connections between categories and sub-categories in order to comprehend and explain the phenomena to which they relate. Finally, I selected and identified several core categories, comprising my open and axial coded data, by validating relationships and refining

and developing the categories, or themes. I concluded the analysis of these data by further refining and reclassifying my original open, axial, and selective codes, thereby effectively grounding my summative constructed theories.

Observation instrument. I used an observation instrument (see Appendix AB) to help contextualize and interpret the pertinent topics of conversation that arose during the two faculty-lead and three peer-lead Sky Leaders team meetings that were held for each of the four major-affiliated teams. I piloted the observation instrument using a set of similar first-year students, faculty members, and peer leaders during the spring 2010 term and revised it accordingly. I administered the team meeting observation instrument during five of the 20 (25%) Sky Leaders team meetings. An undergraduate peer advisor under my direction administered the same instrument during another five of the 20 (25%) Sky Leaders team meetings. Together we captured descriptive and reflective field notes and corresponding audio recordings for ten of the 20 (50%) Sky Leaders team meetings. Due to logistical and schedule alignment challenges, a convenience sampling strategy (Fink, 2009) was used to determine which of the team meetings received observation assignments. However, all (100%) of the mentor and mentee participants were observed at least once during one (or more) of the aforementioned ten observed team meetings. The ten observations and recordings yielded qualitative data that were then analyzed using the previously discussed approach.

Focus group instruments. I conducted member checks (Lincoln & Guba, 1985) via focus group discussions with select members of the mentor and mentee

participant groups. As discussed, the *Final Fall Fiesta* assembly was created as a venue where the perceived effectiveness of the intervention could be further assessed. In turn, I emailed all eight of the mentor participants and all 16 of the mentee participants an invitation (see Appendix AC) to attend the *Final Fall Fiesta*. Due to mentor and mentee availability constraints, a non-probability self-selected sampling strategy (Fink, 2009) was used to determine which of the mentors and mentees participated within the focus groups. As such, seven of the eight (87.5%) mentor participants and eight of the 16 (50%) mentee participants were ultimately included within this data collection phase. I verified, again, that the eight mentees who voluntarily participated were not significantly different at the $p \leq 0.05$ level (on gender, race, and prior academic performance) from the eight who did not participate using Pearson's chi-square tests of independence (Plackett, 1985).

I conducted the mentor focus group at the outset of the *Final Fall Fiesta* assembly, prior to the arrival of the mentee participants. Once the mentees arrived, I lead the entire group through a round of introductions. We then ate, engaged in conversation, and concluded the formal proceedings with a recognition ceremony, distribution of certificates of recognition, and group photographs. The mentee focus group was conducted after the mentor participants had been excused from the assembly. Consistent with common scholarly member checking strategies (Lincoln & Guba, 1985), the aim of both focus group sessions was to check the accuracy, completeness, and validity of my initially constructed themes, which were garnered from previously implemented observation and

interview instruments. Both focus group discussions were guided by my mentor and mentee focus group instruments (see Appendices AD and AE, respectively), again, piloted using a set of similar first-year students, faculty members, and peer leaders during the spring 2010 term and revised accordingly. Moreover, I procured field notes and corresponding audio recordings during both of the focus group discussions. These qualitative data were also analyzed using the aforementioned coding strategies.

Trustworthiness. Given that I employed a mixed-methods approach, I used the data collected to support, complement, and help confirm my overall findings and assertions. Concurrently, I drew upon a nonpositivist or interpretivist (Ashley & Orenstein, 2001; Denzin & Lincoln, 1994; Lincoln & Guba, 1985; Padgett, 2008) epistemology as I went about verifying the trustworthiness (Bowen, 2009; Marshall & Rossman, 1995), or conceptual soundness, of my findings. In doing so, I utilized a methodological triangulation validation procedure (Denzin, 2006) to confirm that multiple data sources produced similar answers to my key research questions. I also established evidentiary warrants for the claims that I generated as a result of my qualitative data analyses. This procedure was championed by Erickson (1985) who wrote that assertions generated during fieldwork must be tested and retested against the database in an effort to conduct a systematic search of the entire data corpus, looking for disconfirming and confirming evidence. In turn, via the employment of a constructivist (Piaget, 1971) validity paradigm, I did, in fact, find disconfirming evidence (Miles & Huberman, 1994) by thoroughly examining the multiple and complex perspectives evidenced

throughout the entire data corpus and by generating hypothetical relationships between my constructed themes and using data from the field to test my hypotheses.

Role of the researcher. As also discussed, I acted as a full participant-observer within the study. However, I cannot claim that I entered the field with a blank slate. My personal and professional theories, along with those presented in the literature, undoubtedly influenced my conceptualization of this study as well as my interactions as a participant-observer throughout the research process. In alignment with Perry (2004), I believe that people have individual realities, but that they may share similar worldviews influenced by each other, unique environments, and time. I also believe that students who are academically and socially engaged, both inside and outside of the classroom, are more likely than their disengaged peers to persist toward graduation. Piaget's (1971) constructivist theory and Tinto's (1993) conceptual model of intuitional departure often guide my practice as an administrator within ASU's College of Nursing and Health Innovation, and these notions undeniably guided my study.

It is also important to note that I relied on these concepts, specifically Tinto's (1993) longitudinal model of intuitional departure, to control the scope of my research. As such, I did my best to remain objective during my observations; however, I must admit that my attention was drawn toward specific discourses that I perceived to have helped explain the phenomena of interest. Although I brought my ideas about reality and my knowledge of the literature into the field with me, I earnestly attempted to allow my participants to shape their own sense

of reality as members of the Sky Leaders program. As a result, I confidently stand by my findings, conclusions, and implications presented herein, yet humbly acknowledge the biases underpinning the study.

Chapter 7

FINDINGS

Presented next are the key findings, as associated with each of the five measures utilized to collect both quantitative and qualitative data within this study. First, findings derived from the quantitative data set are presented. Next, results drawn from qualitative data are presented. All findings, when appropriate, were linked to the mentee participants' initial and subsequent institutional goals and commitments, institutional experiences (with an emphasis on co-curricular engagement behaviors and satisfaction), academic and social integration, and re-enrollment considerations. Additionally, findings related to each of the program's logistical and conceptual components are discussed as necessary.

Quantitative Data Summary

After descriptively and inferentially analyzing the entire quantitative data set, I identified seven statistically and practically significant findings; however, only one finding had a perceived positive effect. Evidence in support of each of these findings, as garnered from my enrollment and survey data collection instruments, are presented as appropriate.

Findings via the enrollment instrument. I analyzed the quantitative data obtained from my enrollment instrument to determine if the mentees were perceived to be more likely than the non-mentees to re-enroll in ASU courses during the spring 2011 academic term (post-intervention). As a result, I found that 14 of the 16 (88%) mentees and 21 of the 23 (91%) non-mentees re-enrolled in spring 2011 classes at ASU. Moreover, by using Pearson's chi-square tests of

independence (Plackett, 1985), I found that the difference between the treatment and control participants' re-enrollment tendencies were insignificant at the $p \leq 0.05$ level ($\chi^2 (1, N = 39) = 0.15, p = 0.70$) (see Appendix AF). Erickson (1985) contends that researchers might enhance the trustworthiness of their work by acknowledging several forms of evidentiary inadequacy. In accord, I must note that there was an inadequate amount of evidence to support the notion that the Sky Leaders program may have positively impacted re-enrollment rates. The length of time (approximately 18 weeks) that I conducted fieldwork did not enable me to collect sufficient amounts of longitudinal data required to correlate the intervention with re-enrollment behaviors. Furthermore, I was unable to obtain explanations as to why the two mentees who did not re-enroll in spring 2011 classes at ASU decided to leave the institution. I made numerous attempts to connect with these potential key informants (Freilich, 1970; Spradley, 1979) via email, phone, text messaging, and a popular social networking web site to no avail.

Findings via the survey instruments. I analyzed quantitative data obtained from my survey instruments to determine if any significant differences between responses provided by the mentee (treatment group) participants, as well as the non-mentee (control group) participants, could be attributed to the Sky Leaders program intervention. Specifically, I first examined the treatment group's pre- and post-survey response differences by both construct and item. Next, I explored the treatment and control groups' pre- and post-survey response differences by construct. Finally, I investigated the differences between the treatment and control

groups' post-survey responses related to their reported engagement behaviors associated with four types of co-curricular activities.

As indicated, I first performed paired samples dependent t-tests (Fadem, 2009) using the data captured from the pre- and post-survey instruments administered to the mentees (treatment group). I ran the t-tests to determine if any statistically significant differences between responses could be attributed to the Sky Leaders program intervention, vis-à-vis each of the constructs that were measured by both instruments (see Table 2).

Table 2

Mentee (Treatment) Participant Group Response Differences by Construct

Strongly Agree=4, Agree=3, Disagree=2, Strongly Disagree=1

Construct	Items		Pretest	Posttest	M ₂ -M ₁	p	d
Goals and commitments	8	M	3.70	3.40	-0.30	0.19	0.68
		SD	0.26	0.87			
Institutional Experiences	6	M	3.49	3.39	-0.10	0.54	0.31
		SD	0.38	0.60			
Engagement Behaviors	4	M	a	a	a	a	a
		SD					
Engagement Satisfaction	4	M	a	a	a	a	a
		SD					
Academic Integration	6	M	3.72	3.36	-0.36	0.05*	1.06
		SD	0.26	0.61			
Social Integration	6	M	3.33	3.33	0.00	0.98	0.01
		SD	0.40	0.49			
Re-enrollment considerations	6	M	3.76	3.58	-0.18	0.38	0.45
		SD	0.32	0.68			

Program conceptualization and logistics	3	M SD	a	a	a	a	a
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Note: N = 16

^aThe mean difference is significant at $p \leq 0.05$.

^aThese items were not eligible for analysis because they were only included on the post-survey.

Interestingly, mentees' agreement levels associated with all of the constructs, save one, decreased over the course of the intervention; however, all but one mean change was statistically insignificant. While it also decreased, respondents' agreement levels associated with their attitudes and intentions regarding academic integration within the ASU community decreased at a statistically significant level from a mean response of 3.72 (SD = 0.26) on the pre-survey to a mean response of 3.36 (SD = 0.61) on the post-survey. The difference between the two means (-0.36) was statistically significant at the $p \leq 0.05$ level, indicating that the Sky Leaders program mentees had less favorable attitudes and intentions concerning their academic integration process at the end of the intervention than at the beginning. Cohen (1988) contends that an effect size between 0.2 and 0.3 may characterize a *small* practical effect, whereas an effect size of about 0.5 may signify a *medium* effect, and an effect size of 0.8 and above may represent a *large* effect. In accord, the Sky Leaders program may have had a large, albeit negative, practical effect ($d = 1.06$) on the mentees' attitudes and intentions related to their academic integration within the ASU community.

Smith and Glass (1987) assert that a statistical relationship and an appropriate time sequence must be established between the independent and dependant variables before cause-and-effect claims can be attributed to the

intervention or a rival hypothesis. Upon verifying that the initial two requisite cannons of evidence were met, I surveyed possible threats to internal validity (Campbell & Stanley, 1967) to identify alternate explanations for the significant decline in the mentees' attitudes and intentions related to academic integration over the course of the intervention. Cook and Campbell (1979) along with Smith and Glass warn that regression, a common threat to internal validity, may occur when subjects are chosen because of their extreme position related to a particular variable. As mentioned, the Sky Leaders program mentees were selected because of their "extreme" statuses as "proactive major-specific course enrollees" and "responsible housing status confirmers." As such, these statistically significant mean score data may seem to show a deleterious effect simply because their responses regressed toward the actual mean, even though the program may have had some benefits related to academic integration. Additionally, maturation, another threat to internal validity, may have also been responsible for the significant decline in the *academic integration* dependant variable. Smith and Glass explain that maturation, or the natural growth and development of the participants, may occur simultaneously with the intervention, thus creating a legitimate rival hypothesis.

Due to the fact that the threats to internal validity known as regression and maturation could not be ruled out, the statistically significant decline in the mentees' attitudes and intentions related to academic integration may not be attributable to the intervention. I used a member check validation strategy (Lincoln & Guba, 1985) to make certain that this finding was accurate,

comprehensive, and complete. As such, I asked three of the 16 (18.8%) mentee participants why their academic integration intentions may have declined over the course of the intervention. These key informants (Freilich, 1970; Spradley, 1979) provided a relatively rapid and complete description of what they perceived was occurring (Tremblay, 1957) by explaining that they had, in fact, considered the act of forging or sustaining faculty relationships to be unnecessary because, as one key informant stated, “[although] it is important to be accepted by my professors, there is no *real* importance. I mean, [because] there is no weight behind being accepted by your professors at ASU...unlike high school...if they accept you or not, the result will still be the same; like, you can still get a high [grade or] GPA or what you want in the end.” Expressly, the mentees may not have *intended* to academically integrate by way of forging or sustaining faculty relationships because they may have considered it superfluous as a result of their natural maturation and adaptation to their new “hard knock, this isn’t high school anymore” collegiate academic environment.

Second, I analyzed the data obtained from the pre- and post-survey instruments administered to the treatment group by individual item to determine which items may have had statistically significant mean differences. In sum, I analyzed thirty-two items across both the pre- and post-survey instruments (see Appendix AG). However, only items with significant mean differences are illustrated (see Table 3).

Table 3

Mentee (Treatment) Participant Group Significant Response Differences by Construct and Item

Strongly Agree=4, Agree=3, Disagree=2, Strongly Disagree=1

Construct	Item#	Question	M ₂ -M ₁	SD	p	<i>d</i>
Goals and commitments	5	I feel that my major is the right choice for me	-0.60	0.88	0.02	1.36
	4	I will learn as much as I can about my major-related field while I'm at ASU	-0.53	0.95	0.04	1.11
	2	I intend to graduate with a degree in the major in which I am currently enrolled	-0.51	0.93	0.05	1.09
Academic Integration	29	I aim to become academically accepted and supported by a wide variety of my professors while I'm at ASU	-0.60	0.72	0.01	1.63

Note: N = 16; the mean difference is significant at the $p \leq 0.05$ level.

Of the 32 total items that were included on the pre- and post-surveys, only four items posted significant mean differences over the course of the intervention, three of which were part of the goals and commitments construct. Specifically, mentees' attitudes and intentions related to their chosen major seemed to have significantly decreased, perhaps due to their involvement within the Sky Leaders program. What's more, Cohen's (1988) effect sizes indicate that the Sky Leaders

program may have had a large, albeit negative, practical effect on the mentees' goals and commitments related to their major as well as their intentions to academically integrate within the ASU community.

Indeed, conversations about majors and affiliated curricula and career pathways oftentimes dominated the Sky Leaders faculty- and peer-lead team meeting agendas. As a result, several of the mentees may have realized that they had selected an inappropriate major during the course of their experience within the Sky Leaders program. Moreover, this explanation was verified by two key informants (Freilich, 1970; Spradley, 1979) who represented the mentee participant group. One of the informants stated: "You come in and you pick the major that you want and you have the ultimate goal in the end, but then you just change. I mean, this happened to me. I started out as [nutrition,] but then after looking at [all of the required science] courses and talking to people [in the Sky Leaders program,] it helped me realize what the major *actually* entailed...and ultimately, I knew that [nutrition] was not what I wanted to do because I'm not that interested in sciences."

Furthermore, in alignment with the findings garnered from the paired samples dependent t-tests, the mentees' mean agreement levels associated with their intentions to be accepted and supported by their professors significantly decreased (-0.60) at the $p \leq 0.05$ level. This decline may be attributable to the mentees' newfound realization that becoming academically accepted and supported by a wide variety of professors may not necessarily correlate with academic performance. However, as previously discussed, regression and

maturation threats to internal validity could not be ruled out as rival explanations for the significant decline in the mentees' mean response differences, nor the large corresponding practical effect sizes, linked to the mentees' attitudes and intentions related to their chosen major and academic integration intentions.

Third, I conducted independent samples t-tests (Fadem, 2009) using the data captured from the pre- and post-survey instruments, which were administered to both the treatment and control groups. I ran these t-tests to identify any statistically significant differences between the mean responses provided by the 16 mentees (treatment group) and the 23 non-mentees (control group) in regard to five constructs that were measured by both instruments (see Table 4).

Table 4

Mentee (Treatment) and Non-Mentee (Control) Participant Group Response Differences by Construct

Strongly Agree=4, Agree=3, Disagree=2, Strongly Disagree=1									
			Pretest		Posttest		M ₂ -		
	Group	N	Mean ₁	SD	Mean ₂	SD	M ₁	p	d
Goals and commitments	Mentee	16	3.70	0.26	3.40	0.87	-0.30	0.41	0.27
	Non	23	3.66	0.22	3.55	0.34	-0.11		
Mentee v. Non Mean diff.							-0.19		
Institutional Experiences	Mentee	16	3.49	0.38	3.39	0.60	-0.10	0.90	0.04
	Non	23	3.28	0.36	3.16	0.31	-0.12		
Mentee v. Non Mean diff.							0.02		
Engagement Behaviors ^{a, b}									
Engagement Satisfaction ^c	Mentee	16	a	a	4.32	0.12	a	0.76	0.10
	Non	23	a	a	4.31	0.11	a		
Academic Integration	Mentee	16	3.72	0.26	3.36	0.61	-0.36	0.04*	0.69
	Non	23	3.43	0.32	3.42	0.29	-0.01		
Mentee v. Non Mean diff.							-0.35		

Social Integration	Mentee	16	3.33	0.40	3.33	0.49	0.00	0.11	0.53
	Non	23	3.27	0.33	3.04	0.37	-0.23		
Mentee v. Non Mean diff.							-0.23		
Re-enrollment considerations	Mentee	16	3.76	0.32	3.58	0.68	-0.18	0.60	0.17
	Non	23	3.60	0.34	3.52	0.40	-0.08		
Mentee v. Non Mean diff.							-0.10		
Program conceptualization and logistics ^d									

^aThe mean difference is significant at $p \leq 0.05$.

^a These items were only included on the post-survey.

^b These items were dichotomous.

^c These items measured participants' behaviors. Responses were based upon dichotomous items. As a result, 87% of missing values were replaced with the series mean.

^d These items were open-ended, free responses questions that were only asked to the treatment group participants within the post-survey.

Upon comparing the mean differences between the mentees' and non-mentees' responses on the pre- and post-surveys, a significant difference in mean variations was found in only one of the five constructs: academic integration, again. The mentees' mean agreement levels associated with their attitudes and intentions regarding academic integration within the ASU community significantly decreased (-0.36) over the course of the intervention, whereas the mean value of the non-mentees' attitudes and intentions related to the same construct remained essentially unchanged (-0.01) during the same period of time. The difference between the two groups' mean differences (-0.35) was statistically significant at the $p \leq 0.05$ level, which indicated that the mentees' less favorable attitudes and intentions concerning their ability to academically integrate might be attributed to the intervention. Furthermore, Cohen's (1988) effect size ($d = 0.69$) indicates that the Sky Leaders program may have had a medium, albeit negative, practical effect on the difference between the mentees' and non-mentees' attitudes and intentions related to their academic integration within the ASU community.

In an effort to confirm the accuracy of this finding, I asked three of the 16 (18.8%) mentee participants why their academic integration attitudes and intentions may have declined over the course of the intervention, while the non-mentees' perceptions related to the same construct remained nearly unchanged. These key informants' (Freilich, 1970; Spradley, 1979) responses, again, focused upon the perception that academic integration was superfluous. However, this rival hypothesis was null due to the fact that these reported perceptions may be generalized across both the treatment and control participant groups. Additionally, it is important to note, again, that the regression and maturation threats to internal validity could not be rejected as alternative explanations for the significant decline in the mentees' mean responses, nor the medium corresponding practical effect size.

And finally, I analyzed quantitative data garnered from the post-survey instruments, which were administered to both the treatment and control groups, in an effort to identify statistically significant differences between mentees' and non-mentees' reported engagement behaviors associated with four types of co-curricular activities: (1) student club or organization experiences; (2) undergraduate research experiences; (3) service learning experiences; and (4) internship experiences (see Table 5).

Table 5

Reported Engagement Behaviors of Mentee (Treatment) and Non-mentee (Control) Participants

Activity	Percent Engaged		p	d
	Treatment (N=16)	Control (N=23)		
Student Club or Organization	15.40% (N=6)	5.10% (N=2)	0.03*	0.73
Undergraduate Research	2.60% (N=1)	0.00% (N=0)	0.23	0.40
Service Learning	5.10% (N=2)	12.80% (N=5)	0.46	0.24
Internship	5.10% (N=2)	7.70% (N=3)	0.96	0.02

* Significant at the $p \leq 0.05$ level.

I found that six of the 16 (15.4%) mentees and two of the 23 (5.1%) non-mentees reported involvement in a student club or organization experience. In turn, by utilizing Pearson's chi-square tests of independence (Plackett, 1985), I found this reported difference in engagement to be statistically significant at the $p \leq 0.05$ level ($X^2(1, N = 39) = 4.80, p = 0.03$). Furthermore, Cohen's (1988) effect size ($d = 0.73$) indicates that the Sky Leaders program may have had a positive, medium practical effect on the mentees' reported level of involvement in student clubs or organizations. Of course, I must acknowledge that promoting involvement within co-curricular activities, chiefly student clubs and organizations, was at the core of the intervention, as I encouraged the mentors to regularly discuss the benefits of joining a student club or organization with their mentees.

Upon attempting to verify that the Sky Leaders program may have been responsible for the significant increase in the mentees' reported level of engagement within student clubs or organizations, I addressed the issues of generalization, description, and judgment related to population external validity. In doing so, I identified *demand characteristics* as a potential threat to external ecological validity (Smith & Glass, 1987). Instead of revealing their true and typical behavior, Smith and Glass caution that the mentees may have acted like "good subjects" by aligning their reported behaviors with what they may have ascertained about my research hypothesis via classic (pretest) sensitization or other unintended communication channels. Moreover, I also recognized that this finding may have also been tainted by *experimenter effects*. Smith and Glass contend that some experimenters, by virtue of their charm and energy, may motivate their research subjects to perform particularly well; in this case by joining, or reporting involvement in, co-curricular clubs or organizations. Accordingly, the effect of the study may not generalize beyond the individual experimenters, or beyond experimenters with similar characteristics.

I also compared the mentee and non-mentee participants' mean satisfaction levels associated with their reported involvement in student club or organization experiences, service learning experiences, undergraduate research experiences, and internship experiences (see Appendix AH). However, I did not find any statistically significant differences at the $p \leq 0.05$ level between the participant groups' mean satisfaction levels linked with these four engagement activities.

Qualitative Data Summary

In alignment with my previously discussed analytical strategies, I reviewed and examined the qualitative data corpus, from which I constructed six total themes. First, concerning the mentees' perceived experiences within the Sky Leaders program, I developed three themes comprising *relationship development and acceptance*, *involvement awareness*, and *increased efficacy*. Next, in terms of the conceptual or logistical aspects of the Sky Leaders program, I constructed three additional themes consisting of *a desire for transdisciplinary gatherings*, *enhancement of team meetings*, and *engagement impediments*.

Experiential themes. Regarding the mentees' perceived experiences within the Sky Leaders program, a *relationship development and acceptance* theme was established. Examples of sociologically constructed and in vivo codes (Strauss, 1999) used to build this theme included: *peers*, *faculty*, *relationships*, *caring*, and *belonging*. The mentees indicated via the post-survey open-ended questions, interview, and focus group session that the Sky Leaders program was important because it helped them meet new people and develop new relationships with their peers, as well as with the program mentors. When asked what they liked most about participating in the program, one mentee indicated that (s)he enjoyed "interacting with other students who are in the same major as I am, talking with professors and mentors about school, clubs, getting involved and other important topics." When asked the same question, another mentee reported the following:

Well, one thing I liked is that I felt like ... [during] the first week of school...you have a support system, pretty much. Before that, I wasn't

sure, like; who do you go to? I know I can always go to my advisor, but is there anyone else around here—because I don't live on campus—that I can talk to or help me figure stuff out. So, I really liked that. [Also, I liked that the program started] right at the beginning [of my first semester]. [The mentors] don't like grab you, but they take you and help you with [figuring stuff out]. I also liked the idea that, like for me, being in [health sciences] and stuff, they would help you continue on afterwards, like help you get into dental or medical school if that was what you were shooting for [sic]. I also thought it was really good how the older students [were] helping the freshmen; where I could go and talk to a senior because I don't think I have any classes with seniors, so I wouldn't have any contact with a senior outside of this program.

The mentees' positive relationship building experiences were representative of the third (institutional experiences) and fourth (integration) components within Tinto's (1993) retention model. As Tinto posits, these positive institutional experiences and subsequent integrative relationships may positively influence students' persistence decisions. In accord, while discussing positive peer relationships during the mentee focus group session, one participant exclaimed: "Like, [one of my Sky Leaders teammates] and I, like, bonded from day one ... [(S)He's] my soul mate!" Likewise, another mentee focus group participant indicated that his/her relationships with ASU faculty proved to be worthwhile after realizing that they were "not all scary robots."

However, some mentees indicated that their relationships with their assigned peer leader mentors could have been more robust. In fact, during the mentee focus group session, one mentee indicated that (s)he “only saw [his/her peer] mentor at [the mentor’s place of employment]; never anywhere else.” Similarly, when the mentees were asked what they did not like about the Sky Leaders program, another participant lamented that his/her “peer mentor couldn’t come [to the team meetings] all the time.” As such, it was possible that these negative, mal-integrative relationship development experiences may have served to weaken the mentees’ persistence intentions.

In terms of the mentees’ perceived experiences within the Sky Leaders program, an *involvement awareness* theme was also recurrent. Patterns of sociologically constructed and in vivo codes (Strauss, 1991) used to establish this theme included: *encouraged, told, facilitated, volunteered, and learned*. Evidence in support of this theme was found within all five of my abovementioned qualitative data collection instruments. In alignment with the main goal of the intervention—to study the effectiveness of mentoring experiences as a co-curricular engagement promotion strategy—the mentees clearly indicated that the Sky Leaders program did indeed help them gain awareness about a variety of co-curricular engagement opportunities. Specifically, when asked what they enjoyed most about participating in the Sky Leaders program, one mentee responded: “I am really glad that I participated in Sky Leaders because I thought it was a great way for me to start getting involved at ASU with a program related to my major. It gave me a lot of opportunities to join clubs and organization, meet students and

professors, and feel more involved as a new student living off-campus.” Likewise, another student indicated that (s)he “got involved with the [pre-health] club because of the advise [sic] that I received from my mentor.” This mentee continued by saying: “[My faculty mentor] encouraged me to be a part of the club that I like.”

Additionally, during the participant interviews, I asked the mentees if their participation within the Sky Leaders impacted their decision to get involved or not get involved with any activities related to their majors. In response, one mentee stated: “Well, yeah, [my faculty mentor] encouraged me to sign up for a couple clubs. I signed up for [the EWO]. I can’t remember what it stands for; but yeah, I signed up for that club, which I probably wouldn’t have done [otherwise].” Another mentee replied: “If I wouldn’t have met with [my peer leader mentor] I wouldn’t have known about how to get involved with the [student nutrition council] and I am going to look more into that too; [I’m] actually [going to] get involved with that and go to the meetings.” The involvement awareness theme was further authenticated at a Sky Leaders team meeting, during which I witnessed a group of three mentees crowd around one of the peer leader mentors to learn more about the student organization that (s)he represented. The three mentees then eagerly provided the mentor with their email addresses in an effort to receive further information about upcoming meetings and activities. Finally, when asked about the perceived effectiveness of the Sky Leader team meetings during the mentee focus group session, one participant poignantly stated:

The meetings helped to raise my awareness about involvement opportunities, and the ‘personal touch’ that I received from my mentors helped ... They made it seem like they actually cared that you went, not just like [receiving] a massive email that went out to like the entire school ... It was like [having] a conversation, so if you had a question you could just ask right away; not like [communicating via] email where you’re like, ‘I have to write an email,’ and then have to wait and wait.

The mentees’ positive experiences associated with becoming aware of engagement opportunities were, again, illustrative of the third (institutional experiences) and fourth (integration) components within Tinto’s (1993) retention model. In alignment with Tinto’s hypotheses, these constructive institutional experiences and subsequent integrative co-curricular experiences may positively influence students’ persistence choices. However, again, I must acknowledge that these findings may have been tainted by *experimenter effects* and *demand characteristics*; two previously discussed potential threats to external ecological validity (Smith & Glass, 1987). Moreover, it is vital to consider the following contradictory statements provided by two of the mentees, which I captured via the mentee interview instrument: “I don’t really know of any activities that are with [sic] my major. I just, I don’t know. I go work out at the [student recreation center], but that’s not really a club or anything.” And “[The Sky Leaders program] hasn’t caused me to not get involved, but I dunno [sic] ... We haven’t talked about any activities. I just know there is that one [student club] that that other [peer leader mentor] is the president of, but that is all I know.”

Finally, concerning the mentees' perceived experiences within the Sky Leaders program, an *increased efficacy* theme was also prevalent. Examples of sociologically constructed and in vivo codes (Strauss, 1991) used to create this theme included: *confidence, support, realization, conversing, and development*. Evidence in support of this theme was garnered from qualitative data obtained through the post-survey open-ended questions, interviews, and the team meeting observations. In accord with Tinto's (1993) retention model, the mentees indicated that the Sky Leaders program helped to increase their own efficacy related to a variety of collegiate experiences, which could ultimately impact their persistence decisions. Specifically, the second (initial institutional goals and commitments) and third (institutional experiences) components within Tinto's model were represented.

Expressly, in response to a post-survey open-ended question, one mentee indicated that (s)he "was able to get an insider's view of my major from my [faculty and peer leader mentors]." Another mentee confessed that "talking to someone at an upper level helped me understand what I need to be ready for ... [The experience also] expanded my views of ASU and my major." These data suggested that the mentees' institutional goals and commitments related to their choice of major and university may have been clarified as a result of their involvement within the Sky Leaders program, thereby potentially and positively impacting their future persistence choices. Furthermore, when another mentee was asked what (s)he enjoyed most about the Sky Leaders program during an interview, (s)he stated: "I mean, you know, it gave me a little bit more confidence.

It made me feel more like, sure, like [of] what I was doing ... I don't know, it just answered a lot of questions for me so I wasn't so iffy about school and my major and things like that.”

After becoming involved with a co-curricular student organization, another mentee shared that “[the experience] really showed me how to be fully prepared for [professional school] admissions when they come.” And on a more pedestrian note, during a Sky Leaders team meeting observation, another mentee expressed concern about “having to always carry my heavy books around [campus].” In response, one of his/her mentee teammates suggested that (s)he “use the bookstore lockers during the day.” Tinto (1993) argues that institutional experiences arising out of formal and informal academic and social interactions that students have with faculty, staff, and other students, such as these, are directly related to students' decisions to stay or leave. While attempting not to overstate these interactions, these data indicated that the Sky Leaders program may have helped to increase efficacy related to the mentees' initial institutional goals and commitments, as well as their institutional experiences. I must also mention that I was unable to find any evidence to disconfirm the validity of this theme. Nevertheless, as previously discussed, these findings may also have been confounded by *experimenter effects* and *demand characteristic* threats to external ecological validity (Smith & Glass, 1987).

In summary, through the construction of three experiential themes involving *relationship development and acceptance*, *involvement awareness*, and *increased efficacy*, I learned that the Sky Leaders program may have provided

mentees with an opportunity to realize gains in cognitive and intellectual skill development, college adjustment, moral and ethical development, practical competence and skills transferability, psychological development, and the accrual of social capital and self identity. Moreover, by promoting involvement in co-curricular activities, such as participation in student organizations, service learning experiences, undergraduate research, and internships, the Sky Leaders program may have increased mentees' satisfaction with their college experience and the rates by which they might persist.

Conceptual and logistical themes. Regarding the mentors' and mentees' perceived experiences related to the conceptual or logistical aspects of the Sky Leaders program, a theme pertaining to the participants' *desire for transdisciplinary gatherings* was prevalent. Patterns of sociologically constructed and in vivo codes (Strauss, 1991) used to establish this theme included: *other majors, expand horizons, networking, transparency, and orientation*. Evidence in support of this theme was garnered from qualitative data obtained through the post-survey open-ended questions, interviews, and the mentor focus group session. In contrast to any specific directive within Tinto's (1990) principles of effective retention programming, both the mentors and mentees indicated that additional transdisciplinary gatherings, including an initial program-wide orientation for all participants, should have been implemented. Specifically, one mentee indicated that (s)he "would've liked [to have had other] meetings with [the] other mentees in the program to get to know each individual." Another mentee concurred by reporting that they "didn't get together enough or meet

everyone else in [the program] aside from the final meeting.” Similarly, when another mentee was interviewed about what (s)he did not like about the Sky Leaders program, we shared the following exchange:

Mentee: I think [it would have been better if we could have] possibly like, [met] together as a group more often; just to be able to connect with all the other people who—even though they have different majors—are still in the program ... I only really knew the four other people who were in my major.

Interviewer: Why do you think it would have been better to meet with [students from] the other majors?

Mentee: Because I know for me, since like, now I am [considering other majors], I could have talked to [the other mentors and mentees] during the semester and found out more [about] what they were doing and probably figured out [which major would have been the best fit for me]... Just being able to communicate with them and be like, ‘hey, actually that is what I *want* to be doing, not what I am doing now.’ So, I think that would have helped.”

Additionally, during the mentor focus group session, one of the faculty mentors affirmed that “something like [the *Final Fall Fiesta*] should have been [held] at the beginning [of the intervention] to allow people to pool together [based on] common interests [aside from their major].” Another faculty mentor concurred by saying: “Plus, the kids had a lot of questions about what the [Sky Leaders] program was all about at the beginning [of the semester]. Having an

orientation for all of us [not just the mentors' training retreat] would have been good.”

In sum, these data indicated that, conceptually and logistically speaking, the implementation of the Sky Leaders program may have been improved by coordinating additional transdisciplinary gatherings, including an initial program-wide orientation, for all participants. However, I must also disclose that a minority of the participants indicated via the interview instrument, for example, that they “wouldn't change a thing” and that they “thought everything was fine” regarding the implementation of the program, which may serve as disconfirming evidence to support the trustworthiness of this theme.

In terms of the mentors' and mentees' perceived experiences related to the conceptual or logistical aspects of the Sky Leaders program, a theme concerning the *enhancement of team meetings* was also established. Examples of sociologically constructed and in vivo codes (Strauss, 1991) used to build this theme included: *frequency*, *activities*, *interests*, and *boring*. Evidence in support of this theme was garnered from qualitative data captured via the post-survey open-ended questions, interviews, and the mentor focus group session. Divergent from any specific piece of Tinto's (1990) principles of effective retention programming, both the mentors and mentees indicated that certain aspects of the Sky Leaders team meetings could have been enhanced, expressly via the addition of more frequent and robust team activities. Explicitly, in response to a post-survey open-ended question about the negative aspects of the intervention, one mentee wrote that (s)he “didn't like [that] we didn't really do anything besides

meet up and talk.” In accord, when another mentee was interviewed about what (s)he did not like about the Sky Leaders program, the following exchange ensued:

Mentee: [We] could have done like, more activities.

Interviewer: Like what?

Mentee: Just more, like ... cool stuff ... [instead of] just sitting there, like eating—which, by the way, I did not mind!—but just something. Like bowling; something fun like that ... I like bowling.

Similarly, another mentee interviewee stated: “At this point I feel like that is all we do is ... just sort of go to [the local coffee shop] or like the dining hall and just talk. I really haven’t seen any beneficial part ... I wish that we could do some more, I don’t know, like leadership things, instead of just meeting with each other and kind of talking amongst ourselves.” A faculty mentor concurred by offering: “We should [plan and conduct] activities, perhaps based on an interest inventory conducted at the outset of the program, [for the mentees].”

Unexpectedly, I also discovered a yearning amongst participants to interact more often. When interviewed, one mentee exclaimed: “We didn’t hang out enough!” Likewise, several post-survey respondents wrote comments such as: “We didn’t meet enough.” While one mentee focus group participant declared: “[The Sky Leaders program] was good, but we could have bonded a lot more. [We] would have liked to have met about once every week and a half—in big groups once or twice a month, then smaller groups the rest of the time.”

In total, these data indicated that, in terms of conception and logistics, the implementation of the Sky Leaders program may have been improved by

organizing more frequent and constructive team activities instead of the “boring coffee talk” sessions that were the norm. However, again, I must note that a minority of the participants reported via the post-survey open-ended items, for example, that the implementation of the program deserved a “ten out of ten” rating, which should add to readers’ interpretation of this theme.

Finally, a propos of the mentors’ and mentees’ perceived experiences related to the conceptual or logistical aspects of the Sky Leaders program, an *engagement impediments* theme was also developed. Patterns of sociologically constructed and in vivo codes (Strauss, 1991) used to establish this theme included: *conflicting responsibilities, commuting challenges, timing issues, communication, and perseverance*. Qualitative data captured via the post-survey, interview, observation, and focus group instruments indicated that many of the program participants felt that they would have valued opportunities to become more engaged in activities associated with the intervention if they had not been impeded by prior commitments, communication breakdowns, schedule conflicts, and/or commuting issues. Specifically, while discussing engagement impediments during the mentee focus group session, one participant said: “The worst is when you have to come to campus for one class [or meeting] and your commute takes longer than the actual thing that you had to come for. I envy the students that can just roll out of bed and be there.”

Similar responses about engagement impediments were obtained via the open-ended questions on the post-survey instrument. One mentee indicated that “it was difficult at times trying to find an appropriate time for all of us to meet at

the same time.” Another mentee reported that engaging in activities outside of class “was sometimes inconvenient with my work schedule [and I] wish I would have gotten a bit more involved with [student club] activities.” Similarly, another mentee mentioned during an interview that his/her peer leader mentor told him/her when the [student club] meetings were going to be, but then continued by saying: “Unfortunately I missed the first meeting and then I didn’t get any emails from [him/her] about when the next ones were.” Also, another mentee mentioned during an interview that (s)he “volunteered for awhile at [a local hospital] and really liked it ... It is just hard now to [engage in co-curricular activities] with school and stuff, I guess. Like, [my peer leader mentor] and [his/her student club]; like, [(s)he] is always emailing us about meetings and the activities they are doing. I wish I could go, but unfortunately I have work, so ... I wish I could be more involved, it is kind of hard right now.”

Furthermore, one of the peer leaders who participated within the mentor focus group discussion stated: “Downtown commuters had different schedules that were hard to accommodate ... and when I tried to schedule a [Sky Leaders team] meeting, [the mentees] didn’t return my emails, calls, or texts.” One of the faculty mentors in attendance concurred by saying that “it was nice [to schedule our team meetings] right after class, but [the mentees’] work schedules and other classes sometimes got in the way.” However, the following conversation captured during a Sky Leaders team meeting observation illustrated how scheduling activities was oftentimes relatively easy:

Faculty mentor: “When would you all like to meet again?”

Mentees (consensus): “This is good; right after class.”

Moreover, one of the faculty members who participated within the mentor focus group discussion added: “everything [in terms of engaging the mentees outside of class] went fine for me.”

As such, prior commitments, communication breakdowns, schedule conflicts, and commuting issues were often cited as engagement impediments; however, the intent to engage, as well as the act of engaging, within a variety of co-curricular activities was prevalently perceived over the course of the study.

In summary, through the construction of the three conceptual and logistical themes comprising *a desire for transdisciplinary gatherings*, *the enhancement of team meetings*, and *engagement impediments*, I found that, although deemed largely effective, certain aspects of the Sky Leaders program could have been administered more effectively. Conceptually, I learned that additional activity-infused transdisciplinary gatherings, including an initial program-wide orientation for all participants, should have been organized. Logistically, I learned that, although nearly impossible to completely overcome, engagement impediments could have been better managed by supplementing the distribution of complimentary daily planners with free web-based meeting planning tools, which are widely available via social networking and “crowd sourcing” websites.

In regard to the six total themes that were constructed after analysis of the entire qualitative data corpus, I learned that the intervention effectively served to limit mentees’ negative experiences within the institution’s academic and social

systems. As a result, students' decisions to depart college, which often arise out of mal-integrative experiences, may have been curbed. Albeit, it is important to remember that the reasons for student attrition are multifaceted and not easily attributed to a narrow set of explanatory factors; as such, the abovementioned conceptual and logistical challenges may have limited the overall positive impact of the intervention.

Chapter 8

PRIMARY RESEARCH QUESTIONS REVISITED

After reporting and reflecting upon the key findings, I was able to address my six primary research questions related to the mentees' and non-mentees' experiences vis-à-vis their statuses as treatment and control participants within the study. In doing so, I formulated clear answers to these important queries. Also, when applicable, I identified noteworthy study implications and opportunities for future research.

First, in terms of whether the mentees were perceived to be more likely than the non-mentees to get involved with academically purposeful activities outside of class, I found that the mentees were indeed more likely to engage, specifically within co-curricular student clubs and organizations. I validated this contention via evidence garnered from all five of my aforementioned data collection instruments. Specifically, one related statistically significant finding—an increase in the mentees' reported level of engagement within student clubs or organizations—reinforced this assertion. Additionally, one aforesaid theme—*involvement awareness*—was largely utilized to confirm this contention. Moreover, I learned that faculty and peer leaders may indeed effectively serve as influential promoters of co-curricular activities.

Second, in terms of whether the mentees were perceived to be more likely than the non-mentees to re-enroll in ASU courses during the subsequent spring 2011 academic term, I found that the mentees were not more likely than the non-mentees to re-enroll. Upon analyzing participants' enrollment data, I found that

the difference between the treatment and control participants' re-enrollment tendencies was statistically insignificant. Again, the length of time (approximately 18 weeks) that I conducted fieldwork did not allow me to collect sufficient amounts of longitudinal data required to correlate the intervention with re-enrollment behaviors. As such, in order to gain a more accurate sense of the impact that the Sky Leaders program may have had on students' persistence behaviors, a longitudinal study may be needed to track the treatment and control participants until they ultimately leave the institution or (hopefully) graduate. Moreover, I was unable to present any other type of evidence to confirm whether this intervention impacted participants' re-enrollment decisions differentially. As a result, I realized that the Sky Leaders program may have served as a catalyst for improving first year, term-to-term student persistence rates, but acknowledged the need for additional longitudinal data to support my supposition.

Third, in terms of whether the Sky Leaders program had a perceived impact on the mentees' attitudes and intentions regarding their initial institutional goals and commitments, I found that the mentees were seemingly and significantly positively impacted, specifically regarding their choice of major. I validated this assertion via evidence garnered across four of my five data sources. Namely, several previously disclosed statistically significant findings related to the participants' institutional goals and commitments, chiefly affiliated with their choice of major, were used to confirm this assertion. Additionally, one aforementioned theme—*increased efficacy*—consequently helped to validate this assertion. Tinto (1993) contends that the act of efficaciously choosing an

appropriate major serves to strengthen students' goals (i.e., desire to graduate) and commitments (i.e., level of tenacity) in regard to their chosen institution. As a result, I learned that the Sky Leaders program clearly helped mentees confirm or reject their initial choice of major via the facilitation of enhanced interactions with faculty, peer leaders, staff, and fellow students.

Fourth, in terms of whether the Sky Leaders program had a perceived impact on the mentees' attitudes and intentions regarding their institutional experiences (with an emphasis on co-curricular engagement behaviors and satisfaction), I found that the mentees were seemingly and significantly positively impacted. I validated this contention using evidence captured from all five data sources. Expressly, one statistically significant finding—an increase in the mentees' reported level of engagement within student clubs or organizations—substantiates this averment. Moreover, three abovementioned themes—*relationship development and acceptance, involvement awareness, and increased efficacy*—were used to validate this assertion. As such, I realized that the Sky Leaders program was, in fact, an effective vehicle for facilitating positive formal and informal academic and social interactions among the participants, thereby potentially making it more difficult for the mentees' to subsequently decide to leave ASU.

Fifth, in terms of whether the Sky Leaders program had a perceived impact on the mentees' attitudes and intentions regarding their academic integration experiences, I found that the mentees were seemingly and significantly positively impacted, specifically regarding faculty interactions. Again, I validated

this position via evidence garnered across data sources. Deliberately, several statistically significant, albeit deleterious, findings related to the participants' academic integration attitudes and intentions were considered as I formulated this assertion. As discussed, however, threats to internal validity known as regression and maturation could not be ruled out as rival explanations for this statistically significant decline. Conversely, one previously discussed affirmative theme—*relationship development and acceptance*—was mainly relied upon to defend my claim.

Demonstratively, when asked what they liked most about participating within the Sky Leaders program, one mentee said: “I liked working closer [sic] with the different professors and stuff, which was really, I don't know, it was an advantage... especially because [my faculty mentor] has worked in the field of [nutrition] and stuff. And even though that is not my major, it is definitely something that pertains to my major.” Similar qualitative evidence was obtained through an open-ended survey question when one mentee wrote: “[The Sky Leaders program] helped me to feel more comfortable w/ ASU [sic] and with the people here. It helped me become more comfortable w/ [sic] approaching professors and adults.”

Although the mentees reported an affinity with their faculty mentors and other ASU academic personnel, the findings generated from the quantitative data indicated that they may have also realized that their academic standing would not be positively impacted as a result of their involvement within the Sky Leaders program. As such, I feel that further research may be needed to examine the

impact that the Sky Leaders program, or a similar intervention, may have on students' academic integration, specifically regarding their relationships with faculty.

Last, in terms of whether the Sky Leaders program had a perceived impact on the mentees' attitudes and intentions regarding their social integration experiences, I found that the mentees were seemingly and significantly positively impacted. I validated this contention via evidence garnered from four of my five data sources. In turn, two abovementioned themes—*relationship development and acceptance* and *increased efficacy*—were used to verify this contention. As a result, I realized that the Sky Leaders program effectively facilitated positive formal and informal social interactions among the participants, again, thereby potentially making it more difficult for the mentees to consequently decide to depart ASU.

Taken as a whole, these experientially-related primary research question elucidations indicate that the Sky Leaders program had an overall positive effect on mentees' initial institutional goals and commitments, as well as their integrative institutional experiences. Given that the majority of the positive experiential outcomes directly aligned with several key components within Tinto's (1993) longitudinal model of institutional departure from institutions of higher education, I contended that the intervention was largely impactful. However, as discussed, opportunities for further longitudinal and academic integration research exist.

Chapter 9

CONCLUSIONS

I concluded this study by contriving logical, rather than definitive, answers to my research questions affiliated with the conceptual and logistical implementation of this intervention. Specifically, I recognized both beneficial and problematic features associated with the execution of the Sky Leaders program. When appropriate, I also acknowledged important research implications and opportunities for further study.

Overall, I found that the Sky Leaders program had a positive impact on the mentees' awareness about and engagement in co-curricular activities, relationship development, feelings of acceptance, and their personal sense of efficacy. These encouraging outcomes were achieved, in part, via the execution of two successful conceptual and logistical aspects of the intervention. Specifically, in terms of the perceived effect of focusing the Sky Leaders program on first-year, first-semester college students, I concluded that this strategy was seemingly and significantly effective. I validated this conclusion by way of evidence garnered from all five of my qualitative data collection instruments. Consequently, three aforesaid themes—*relationship development and acceptance*, *involvement awareness*, and *increased efficacy*—were also used to verify this particular assertion.

As such, in alignment with Tinto's (1990) position that retention programming should be frontloaded to accommodate primarily first-year students, I learned that this frontloading tactic indeed served to solidify the mentees' initial institutional goals and commitments, and simultaneously positively impacted their

early integrative institutional experiences. As discussed, I targeted first-year commuter students for this study due to the fact that commuters tend to less naturally integrate into the campus community by virtue of their off-campus living status (Tinto, 1997, 2000). As a result, opportunities to study the effects of the Sky Leaders program, or a similar intervention, vis-à-vis other “at-risk” student populations, such as those challenged by financial impediments, academic under-preparedness, out-of-state/country residential statuses, or socio-cultural disparities, remain.

Additionally, I concluded that the perceived effect of implementing faculty and peer leader-hosted Sky Leaders team meetings was seemingly and significantly effective. I validated this contention using evidence captured from all five of my qualitative data collection instruments. Again, three positive aforementioned themes—*relationship development and acceptance*, *involvement awareness*, and *increased efficacy*—were also utilized to validate this contention. In accord, I realized that facilitating the intervention via a “bottom-up” management protocol was an effective way to initiate these valuable Sky Leaders team meetings. As a result, each faculty and peer leader mentor ultimately hosted at least two Sky Leaders meetings with their assigned student mentee participants outside of the formal classroom setting. However, as previously discussed, further research may be required to determine the most efficient and effective methods of collaboratively selecting the best team meeting days, times, and locations.

Yet despite the fact that the Sky Leaders program was found to have had an overall positive effect on mentees’ initial institutional goals and commitments

as well as their integrative institutional experiences, these impactful outcomes may have also been hindered by four troublesome conceptual and logistical aspects of the intervention. First, in terms of the perceived sustainability of the Sky Leaders program, I concluded that budgetary, personnel, resource, and/or logistical restrictions may limit the sustainability of the intervention. This conclusion was evidenced by the *enhancement of team meetings* theme, which was constructed during the qualitative data analysis. In turn, I learned that, although support to build an enduring intervention was initially procured, the college's executive leadership team's continued ability to fiscally support the current iteration of the Sky Leaders program, which was frugally operated with a \$300.00 budget, may be limited. Moreover, based on the initial success of the Sky Leaders program, plans to scale up the intervention may ultimately be impeded by macro-economic challenges. Upon conducting a comparative analysis of other well-established collegiate mentoring programs, I discovered that most student peer mentors are compensated for their efforts at a rate of approximately \$1,000.00 per academic year (M. Cook & J. Johnston, personal communication, April 12, 2011). Based on my college's potentially "at risk" first-year student population, I deduced that at least seven peer mentors would be needed to maintain an appropriate mentor-to-mentee ratio. As a result, identifying creative ways to continue these impactful mentoring experiences and engagement promotion strategies within a reasonable budget will be an imperative next step.

Employing a rapid cycle quality improvement strategy (Lynn & Wilkinson, 2003), which is widely lauded within the healthcare industry (Joseph

M. Juran Center, 2004), may be an innovative way to scale up the Sky Leaders program. Rapid cycle quality improvement, which is also known as rapid cycle testing, is a model of innovation that is applied in short test periods with small samples of participants to efficiently measure the effectiveness of the intervention being implemented. As such, I envision several more rapid iterations of the Sky Leaders program being carried out over the next academic year. Therefore, the goal of this rapid cycle testing initiative would be to create a well-vetted version of the program that could be sustained with the most economical budget possible.

Second, in terms of the perceived effect of facilitating the *Sky Leaders Mentor Training Retreat*, I concluded that this event was seemingly and significantly ineffective. Evidence obtained from several of my qualitative data collection instruments lead me to conclude that the training retreat could have been more effectively executed. For instance, in alignment with the abovementioned *desire for transdisciplinary gatherings* and *enhancement of team meetings* themes, I ascertained that an orientation for all of the program participants could have been scheduled in conjunction with the retreat. Likewise, an interest inventory, or a similar instrument, could have been utilized during the retreat in an effort to identify possible Sky Leaders team activities.

Third, in terms of the perceived effect of promoting co-curricular engagement opportunities via campus-wide collaboration, I concluded that this strategy was also seemingly and significantly ineffective. Evidence obtained from several of my data collection instruments lead me to deduce that collaborative, campus-wide promotion of co-curricular engagement opportunities could have

been more effectively executed. For example, in alignment with the previously mentioned *enhancement of team meetings* theme, I realized that a document listing all of the co-curricular engagement opportunities available to the mentees could have been distributed at the outset of the intervention. Additionally, representatives from various campus-wide co-curricular engagement enterprises could have been invited to participate more actively within the program.

Lastly, in terms of the perceived effect of the *Final Fall Fiesta* assembly, I was unable to determine the effectiveness of the affair, specifically regarding the overarching retention and engagement promotion goals of the study, due to an insufficient amount of evidence. Regardless, I concluded that the assembly was, in fact, a useful venue for conducting focus group discussions and initial member checks. Moreover, in alignment with my aim to assess the intervention with an eye toward program improvement, the assembly provided me an opportunity to procure lucrative field notes and corresponding audio recordings during the focus group and member check sessions. Additionally, the participants in attendance seemed to enjoy several aspects of the assembly, including the complimentary lunch, camaraderie, and recognition ceremony, which may have partially served to indoctrinate the mentees into the academic and social fabric of the college and campus community.

In summary, I concluded that, by and large, the intervention had an overall positive effect on the mentees' initial institutional goals and commitments, as well as their integrative institutional experiences. These positive results were mainly due to the successful implementation of the Sky Leaders team meetings, which

were designed to accommodate potentially “at risk” first-year, first-semester commuter students. However, these impactful outcomes may have been limited by ongoing sustainability challenges, as well as conceptual and logistical shortcomings associated with the execution of the *Sky Leaders Mentor Training Retreat*, the collaborative campus-wide co-curricular engagement promotional strategy, and the *Final Fall Fiesta* assembly.

In total, I aver that the Sky Leaders program ultimately served to disavow a decades-old superficial separation that has existed between college faculties and retention-focused student affairs professionals concerning the implementation of co-curricular, retention-targeted programming. In effect, this study has illuminated specific roles that faculty, staff members, and peer leaders may play when attempting to successfully promote co-curricular engagement opportunities to students. As noted, the range of specific types of retention program implementation strategies is wide-ranging and tactics that prove to be effective in one setting may not prove equally effective in another. As such, the Sky Leaders program, or similar interventions, should be thoughtfully conceptualized, initiated, evaluated, sustained, or scaled up by conscientious collegiate leaders and action researchers.

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APPENDIX A
DEFINITION OF KEY TERMS

Co-curricular activities: Activities that occur alongside formal curriculum (Kuh, 2005; Skipper & Argo, 2003). Researchers (Astin, 1985; Pascarella & Terenzini, 2005; Upcraft, 1990) suggest that co-curricular activities have the greatest positive impact on student persistence.

Extra-curricular activities: Activities that occur outside of student's programs of study and are therefore less connected to curriculum (Kuh, 2005b; Skipper & Argo, 2003). Although extra-curricular involvement helps students make important connections to the campus community and gains in personal development, some researchers (Astin, 1985; Pascarella & Terenzini, 2005; Upcraft, 1990) suggest that extra-curricular activities have a lesser impact on student persistence when compared with co-curricular involvement.

Student engagement: The time and energy students devote to educationally purposeful activities (Kuh, 2005a). This definition originates from Pace's (1982) measures of quality of effort and Astin's (1985) theory of involvement.

Student persistence: The desires and actions of a student to stay within the system of higher education from beginning through degree completion (Seidman, 2005).

Student retention: The ability of an institution to keep students continuously enrolled from admission through graduation (Seidman, 2005).

Student retention programming: Strategies developed and implemented within the context and culture of an individual institution or unit in an effort to promote student success and ultimately persistence to graduation (Campbell & Nutt, 2010).

APPENDIX B

TINTO'S LONGITUDNIAL MODEL OF INSTITUTIONAL DEPARTURE

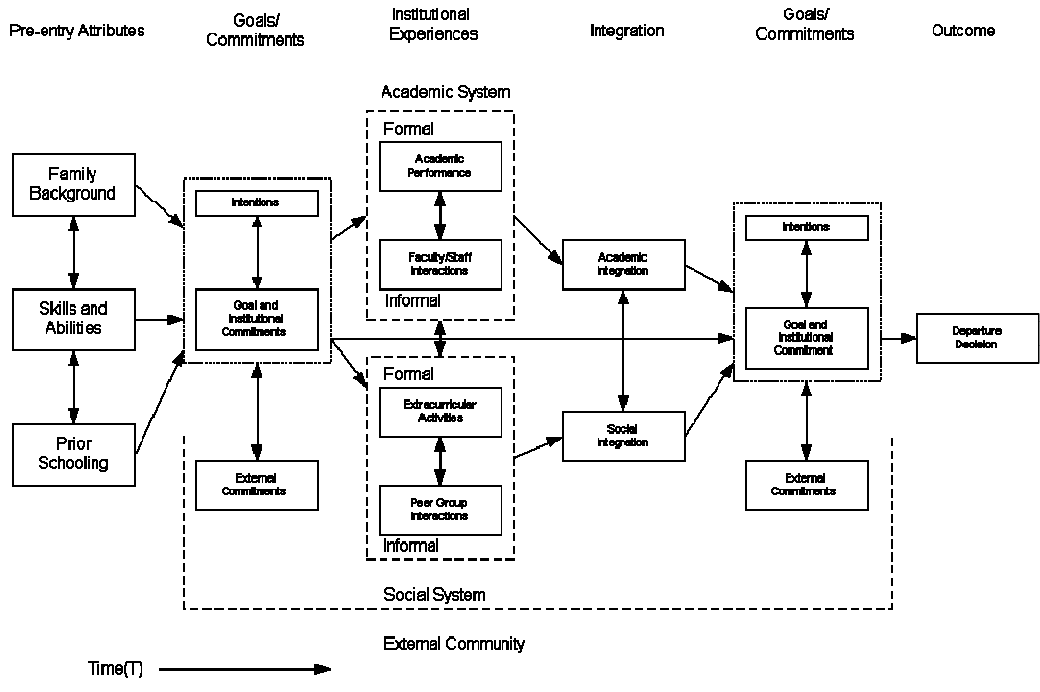


Fig. 4.1. A longitudinal model of institutional departure.
 Source: V. Tinto (1994). Leaving College...

APPENDIX C

FACULTY MENTOR PARTICIPANT INVITATION

I invited four faculty mentors to participate within the study based upon their status as professors within the college, as well as their demonstrated familiarity with, and support of, co-curricular student engagement initiatives. The following is one example of the four faculty mentor invitation letters that were distributed via email on various dates throughout the month of May, 2010:

Hello [EXW 100 Instructor],

As you may know, I am in the process of earning my Ed.D. in Leadership and Innovation under the supervision of Dr. Audrey Beardsley, an Assistant Professor within ASU's Mary Lou Fulton Teachers College at the West campus. Regarding my dissertation study, which is scheduled to begin in earnest this coming summer, I am proposing a retention intervention aimed at a sample of our college's incoming 2010-11 first year commuter students. Specifically, in addition to select NTR, HSC, and BSN students, I would like to target first-year commuter students majoring in Exercise & Wellness who are enrolled in your fall EXW 100 course on the Downtown campus. As such, I am writing to request a meeting with you to discuss the proposed intervention and solicit your support and potential involvement.

Please let me know if you would be available for a 30-60 minute meeting within the next two weeks. Also, if you think it would be appropriate to include [the EXW Program Director] in our conversation, please feel free to include him/her in your response to my meeting request. As an FYI, I have already discussed this intervention proposal with [the CONHI Deans] and have garnered their support.

Thanks,
Brent

Brent Sebold
Assistant Director
College of Nursing and Health Innovation
Arizona State University

APPENDIX D

PEER LEADER MENTOR PARTICIPANT INVITATION

I invited four peer leader mentors to participate within the study based on their status as elected officials within college-affiliated student organizations, as well as their demonstrated familiarity with, and support of, co-curricular student engagement opportunities. The following is one example of the four peer leader mentor invitation letters that were distributed via email on various dates throughout the month of May, 2010:

Hi [Pre-Health Club President],

Based on your leadership role within the Pre-Health Club, I would like you to participate as a Peer Mentor within a retention-focused intervention that I am conducting on the Downtown campus this coming fall. Contextually, I am in the process of earning my Ed.D. in Leadership and Innovation within ASU's Mary Lou Fulton Teachers College. My dissertation study focuses upon a retention intervention aimed at a sample of our college's incoming 2010-11 first year commuter students. Specifically, in addition to select Exercise and Wellness, Nutrition, and Nursing students, I would like to target first-year commuter students majoring in Health Sciences on the Downtown campus.

Please let me know if you would be available for a 30-60 minute meeting within the next two weeks to discuss the proposed intervention and your potential involvement.

Thanks,
Brent

Brent Sebold
Assistant Director
College of Nursing and Health Innovation
Arizona State University

APPENDIX E
SKY LEADERS PROGRAM BUDGET

Items	Projected	Actual	Notes
Refreshment Payment Cards for Peer Mentor-Facilitated Sky Leader Meetings (\$2/participant x 5 participants x 3 team meetings = \$ 30 x 4 Teams)	\$ 120.00	\$ -	complimentary RC meal plans
Refreshment Payment Cards for Faculty Mentor-Facilitated Sky Leader Meetings (\$2/participant x 5 participants x 2 team meetings = \$ 20 x 4 Teams)	\$ 80.00	\$ 19.12	reimbursed Ruth Flucker
Sky Leaders Program T-Shirts \$8/t-shirt x 25 (16 students + 4 peer mentors + 4 faculty mentors + 1 program director)	\$ 200.00	\$ 190.84	paid by Sally with CONHI p-card
Refreshments for the Final Fall Fiesta Debriefing Assembly (Focus Group/Member Check) \$2/participant x 25 (all program participants)	\$ 50.00	\$ 117.75	spurred due to meal plans
Refreshments for the Summer Mentor Training Retreat \$2/participant x 9 (4 peer mentors + 4 faculty mentors + 1 program director)	\$ 18.00	\$ 54.21	spurred due to meal plans
Planners for Treatment Group Participants \$4.50 x 16 plus tax	\$ -	\$ 77.26	helped to facilitate scheduling
Certificates for Program Participants (card stock purchase) 30 sheets	\$ -	\$ 2.95	N/A
Totals:	\$ 468.00	\$ 462.13	
		<190.84>	paid by Sally with CONHI p-card
		\$ 271.29	reimbursement amount to Brent

APPENDIX F

SKY LEADERS PROGRAM T-SHIRT



APPENDIX G

SKY LEADERS PROGRAM SUN AWARD



Continuous Improvement

Creativity

Customer Satisfaction

✓ Excellent Performance

Fostering Cooperation

Promoting ASU

Sustainability

Valuing Diversity

You Name It!

SUN AWARD

SERVING UNIVERSITY NEEDS

Presented to: Ruth Flucker

Department: CONHI Academic Affairs UG

For: Being an awesome Sky Leader mentor!

Presented by: Brent Sebold

Date: January 08, 2011



APPENDIX H
SKY LEADERS PROGRAM MENTOR TRAINING RETREAT
CURRICULUM

Brent Sebold
 Assistant Director of Recruitment & Retention
 Arizona State University | The Downtown Phoenix Campus

Recruiting and Retaining CONHI Students

session overview

persistence }
 engagement } imperative
 promotion }
 our strategies

persistence imperative

educational researchers agree that diploma and degree attainment rates must improve if educational institutions are to meet the needs of our nation and world.

W. A. K. W., 1988; Berger & Hertz, 1999; H. J., 2008; National Commission on Excellence in Education, 1983; Pascarella & Terenzini, 2005; Study Group on the Condition of Excellence in American Higher Education, 1992



engagement imperative

students who are actively engaged in educationally purposeful activities, both inside and outside of the classroom, are more likely than their disengaged peers to persist until graduation.

Kohn, 1998; Long, 2004; Pascarella, 2007; Pascarella & Terenzini, 2005; Terenzini, 2005; Terenzini & Pascarella, 2007; Terenzini, 2008; Terenzini, 2009; Terenzini, 2010; Terenzini, 2011; Terenzini, 2012; Terenzini, 2013; Terenzini, 2014; Terenzini, 2015; Terenzini, 2016; Terenzini, 2017; Terenzini, 2018; Terenzini, 2019; Terenzini, 2020; Terenzini, 2021; Terenzini, 2022; Terenzini, 2023; Terenzini, 2024; Terenzini, 2025



promotion imperative

once these academically purposeful opportunities are established, teachers and administrators (myself included) often struggle with the next step in the retention continuum, which calls for these engagement opportunities to be effectively promoted to the student population.



some sample data

MESSAGE

Academic	34%
Professional	28%
Personal	18%
Career	12%
Adult Values	8%
Time or Location	0%

Multiple Subject Assessment scores are shared for each organization.

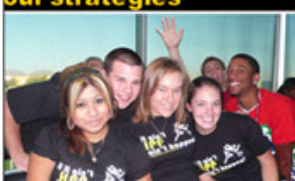
some sample data

MEDIA

Peer Referrals	34%
Faculty Referrals	11%
E-Mail Messages	11%
Facebook	21%
Flyers	11%
Tabling	11%

Multiple Subject Assessment scores are shared for each organization.

our strategies



keep in touch

e-mail: brent.sebold@asu.edu
 phone: 602.496.2153

APPENDIX I

SKY LEADERS PROGRAM MENTORS EXPECTED

MINIMUM LEVEL OF ACTIVITY

Faculty Mentors

1. Attend the mentor training session and get the necessary materials (mentee roster, t-shirt, etc.)
2. Invite Brent to attend your first class meeting (ASU 101, EXW 100, or NTR 150).
3. Wrap up your first class meeting.
4. Invite your four mentees to stay after class to speak with you for approximately 10 minutes (this meeting will occur after Brent administers the Sky Leaders pre-survey to all eligible students, which will take about 10 minutes at the end of the regularly-scheduled class time).
5. Congratulate your mentees for being selected as the College's inaugural members of Sky Leaders program.
6. Explain your role as a faculty mentor and share your excitement about the opportunity to get to know them on a more personal level.
7. Explain how they will also be contacted by a peer mentor within their major.
8. Explain how you'd like to meet with them in a comfortable setting (Starbucks) and talk about their interests and transition into ASU.
9. Distribute planners and identify an initial meeting day, time, and location. This meeting should be held during the second or third week of the term.
10. Brent will distribute his mentee participation invitation and ask them to fill it out on the spot.
11. If the correct size is available, Brent will distribute Sky Leaders t-shirts to the mentees.
12. Ask the mentees to alert you if they are unable make the first team meeting. Keep Brent in the loop regarding ALL communications and meeting plans, no matter how trivial!
13. Meet with your mentees and buy drinks and treats with your \$25/week ASU Sun Card account. Use the *team meeting discussion prompts* document to guide your conversation.
14. Schedule a second team meeting at the conclusion of the first. This meeting should be held during the third or fourth week of the term. Notify Brent of the scheduled meeting day, time, and location if he is absent.
15. Conduct your second team meeting. Buy drinks and treats with your \$25/week ASU Sun Card account and use the *team meeting discussion prompts* document to guide your conversation. Brent and the team's peer mentor may attend this meeting as well.
16. Encourage your mentees to keep in touch beyond their experience within your class.
17. Attend the *final fall fiesta debriefing assembly* in October (details TBA).

Peer Leader Mentors

1. Attend the mentor training session and get the necessary materials (mentee roster, t-shirt, etc.)

2. Wait for Brent to confirm that your mentees have agreed to participate within the program.
3. Contact your mentees by email to introduce yourself and share your excitement about the opportunity to get to know them on a more personal level.
4. Attend the faculty mentor's second team meeting (Brent will notify you of the meeting day, time, and location in advance).
5. Schedule a third team meeting (your first) at the conclusion of the faculty mentor's second meeting. This meeting should be held during the fourth or fifth week of the term. Notify Brent of the scheduled meeting day, time, and location if he is absent.
6. Conduct your initial team meeting. Buy drinks and treats with your \$25/week ASU Sun Card account and use the *team meeting discussion prompts* document to guide your conversation. Brent or one of his designees may attend this meeting as well.
7. Schedule a fourth team meeting (your second) at the conclusion of the third. This meeting should be held during the fifth or sixth week of the term and may be held in conjunction with your student organization's meeting. Notify Brent of the scheduled meeting day, time, and location if he is absent.
8. Conduct your second team meeting. Buy drinks and treats with your \$25/week ASU Sun Card account and use the *team meeting discussion prompts* document to guide your conversation. Brent or one of his designees may attend this meeting as well.
9. Schedule a fifth team meeting (your third) at the conclusion of the fourth. This meeting should be held during the sixth or seventh week of the term and may be held in conjunction with your student organization's meeting. Notify Brent of the scheduled meeting day, time, and location if he is absent.
10. Conduct your third team meeting. Buy drinks and treats with your \$25/week ASU Sun Card account and use the *team meeting discussion prompts* document to guide your conversation. Brent or one of his designees may attend this meeting as well.
11. Encourage your mentees to keep in touch beyond their experience within your student organization (if applicable).
12. Attend the *final fall fiesta debriefing assembly* in October (details TBA).

Contact Brent with ANY questions or concerns.

APPENDIX J

FACULTY AND PEER MENTOR-LEAD SKY LEADERS TEAM MEETING

DISCUSSION PROTOCOL

The faculty and student peer-lead Sky Leaders meetings were encouraged to utilize the following discussion prompts:

- (1) Informal mentor/mentee introductions and small talk
- (2) Discussion of mentee's pre-entry attributes
 - a. Family background (e.g., first-generation)
 - b. Prior schooling and academic achievement
 - c. Skills and abilities (academic and social confidence)
- (3) Discussion of mentee's initial institutional goals and commitments
 - a. Related to their chosen major, college, campus, and university
 - a. External commitments (e.g., work, family, etc.)
- (4) Discussion of mentee's institutional experiences (i.e., formal and informal academic and social interactions that the mentees may be having with faculty, staff, and other students both inside and outside of the classroom)
 - a. Formal academic experiences (e.g., homework, quizzes, tests, etc.)
 - b. Informal academic experiences (e.g., interactions with faculty and staff)
 - c. Formal social experiences (e.g., extra/co-curricular activities)
 - d. Informal academic experiences (e.g., peer group interactions)
- (5) Discussion aimed at gauging mentee's integration process.
 - a. Academic integration
 - b. Social integration

APPENDIX K

SKY LEADERS PROGRAM CERTIFICATES OF RECOGNITION



In Recognition of



Mentee's Name

Sky Leader
2010

Bernadette Melnyk,
Dean
College of Nursing and Health Innovation

Craig D. Thatcher,
Executive Dean
College of Nursing and Health Innovation

Brent Sebold,
Assistant Director
College of Nursing and Health Innovation

APPENDIX L

PRE- AND POST-SURVEY INVITATION ISSUED TO TREATMENT

AND CONTROL PARTICIPANTS

Fellow Sun Devil:

My name is Brent Sebold and I am a graduate student under the direction of Dr. Audrey Beardsley within the Mary Lou Fulton Teachers College at Arizona State University. I am conducting a research study to learn how to effectively promote co-curricular engagement opportunities to the College of Nursing and Health Innovation's first-year commuter student population. I am inviting you to complete the attached questionnaire, which should take approximately 15 minutes of your time. In doing so, your responses will help to shape important policies and programming initiatives for future Sun Devils.

Your participation in this study is voluntary. You may skip questions if you wish. If you choose not to participate, there will be no penalty. There are no foreseeable risks or discomforts associated with your participation; however, you must be 18 years of age or older to participate. Please be advised that your responses will remain completely confidential. The results of this study will only be shared in the aggregate form via reports, presentations, or publications and your confidentiality will be maintained by replacing your name with a code number.

If you have any questions concerning the research study, please contact Dr. Audrey Beardsley, the principal investigator, at audrey.beardsley@asu.edu or (602) 543-6374, or Brent Sebold, the co-investigator, at brent.sebold@asu.edu or (602) 496-2153. If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you may contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance at (480) 965-6788.

Return of the questionnaire will be considered your consent to participate.

Thank you and go Devils!

Sincerely,



Brent Sebold

APPENDIX M
PRE-SURVEY ISSUED TO TREATMENT AND
CONTROL GROUP PARTICIPANTS

- (1) Code Number (your 10-digit ASU ID #):
- (2) Your major:
 - a. Nursing
 - b. Nutrition (all concentrations)
 - c. Exercise & Wellness (all concentrations)
 - d. Health Sciences (all concentrations)
 - e. Other:
- (3) In regard to my tuition classification, I am considered:
 - a. In-state
 - b. Out-of-state
 - c. International
- (4) Gender:
 - a. Female
 - b. Male
- (5) Racial or Ethnic Identity:
 - a. American Indian or other Native American
 - b. Asian, Asian American or Pacific Islander
 - c. Black or African American
 - d. White (non-Hispanic)
 - e. Mexican, Mexican American, Puerto Rican, Other Hispanic or Latino
 - f. Multiracial
 - g. Other
 - h. I prefer not to respond
- (6) Did your mother earn a bachelor's degree of any kind?
 - a. Yes
 - b. No
- (7) Did your father earn a bachelor's degree of any kind?
 - a. Yes
 - b. No
- (8) How would you describe your employment status this semester?
 - a. I spend more time at work than I do in class or studying
 - b. The amount of time that I spend at work is equal to time that I spend in class or studying
 - c. I spend less time at work than I do in class or studying
 - d. I do not work while taking classes

- (9) During your high school years, how would you describe your academic performance?
- a. I earned mostly straight A's
 - b. I earned mostly A's and B's
 - c. I earned mostly B's and C's
 - d. I earned mostly C's and D's
 - e. My grades were so bad that I can't believe that ASU even accepted me!
- (10) How would you describe your financial status this semester and beyond?
- a. My family/supporters and I are generally concerned about how we/I will cover the expenses required for me to earn my ASU degree within the next 3-5 years.
 - b. My family/supporters and I are NOT generally concerned about how we/I will cover the expenses required for me to earn my ASU degree within the next 3-5 years.

Section 1

- (1) It is important to me to graduate from ASU within 3-5 years:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (2) I intend to graduate with a degree in the major in which I am currently enrolled:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (3) I am satisfied with my decision to attend ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (4) I will learn as much as I can about my major-related field while I'm at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (5) I feel that my major is the right choice for me:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- (6) I do not plan on transferring to another college or university at some point:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- (7) I am committed to earning a Bachelor's degree at ASU no matter what it takes:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- (8) I feel ASU is a good fit for me personally:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree

Section 2

Note: the following section will ask you about “activities that are related to your major.” These activities might include participation in student clubs and organizations (for example, the Student Nutrition Council), service learning experiences (for example, volunteering at a local blood bank), undergraduate research experiences (for example, participating in a faculty member’s fitness research study), and internships (for example, paid or unpaid work experience in a local health clinic). “Activities that are related to your major” do not include activities that are not related to what you learn in the classroom, such as attending sporting or cultural events, rushing a social fraternity or sorority, or participating in student government, social programming, or intramural sports.

- (1) It is important for to me to get involved with activities that are related to my major:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree

- (2) I intend to get involved with activities that are related to my major at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (3) I am satisfied with opportunities available to me at ASU to get involved with activities that are related my major:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (4) I will obtain more information about activities available to me at ASU that are related my major:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (5) I will become involved with activities that are related my major outside of class:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (6) It is important for me to learn how to become involved with (or obtain more information about) activities available to me at ASU that are related my major:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

Section 3.1

- (1) It is important for me to feel accepted and supported by my professors at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (2) Thus far, I am satisfied with the level of acceptance and support that I receive from my professors at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (3) I intend to feel genuinely accepted and supported by my professors this semester at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (4) I aim to become academically accepted and supported by a wide variety of my professors while I'm at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (5) I intend to increase my academic confidence while I'm at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (6) I feel comfortable approaching my professors both inside and outside of the classroom:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

Section 3.2

- (1) It is important for me to feel accepted and supported by my peers at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (2) I am satisfied with the level of acceptance and support that I receive from my peers at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (3) I intend to feel genuinely accepted and supported by my peers at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (4) I will try to become socially accepted and supported by a wide variety of my peers while I'm at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (5) I intend to increase my social confidence while I'm at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (6) I feel comfortable approaching my peers both inside and outside of the classroom:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

Section 4

- (1) It is important for me to re-enroll in classes next semester:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (2) I intend to re-enroll in classes at ASU until I ultimately graduate:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (3) I feel financially comfortable enough to remain in classes this semester and enroll in next semester's classes:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (4) I feel culturally comfortable enough to remain in classes this semester and enroll in next semester's classes:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (5) I feel academically comfortable enough to remain in classes this semester and enroll in next semester's classes:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (6) I feel socially comfortable enough to remain in classes this semester and enroll in next semester's classes:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

Thank you!

APPENDIX N
CONSENT TO PARTICIPATE AS A MENTEE WITHIN
THE SKY LEADERS PROGRAM

August 19, 2010

Dear Sun Devil,

Congratulations—you have been selected as an inaugural member of the College of Nursing and Health Innovation’s Sky Leaders program! As one of only four other students within your major selected for the program, you will have an exclusive opportunity to forge a unique bond with a faculty and peer mentor during several forthcoming Sky Leader team meetings. Before I tell you more about the program, I would like to introduce myself: my name is Brent Sebold and I am the director of the Sky Leaders program. I am also an academic advisor and a doctoral student here at ASU. The Sky Leaders program has been created to help you become more integrated into the exciting academic and social communities that exist on ASU’s Downtown Phoenix campus.

If you agree to become an active Sky Leader team member, your participation and contributions will help to shape important policies and programming initiatives for countless future Sun Devils. Furthermore, you may personally gain priceless “insider knowledge” about:

- your major, classes, and undergraduate research opportunities
- service learning and other engagement opportunities
- internships and future career pathways
- college tips and tricks
- leadership opportunities

As a Sky Leaders team member, you will have an opportunity to meet with your mentors and me several times outside of class over the course of the first twelve weeks of the fall semester. These meetings are designed to be casual, but very worthwhile. We will most likely meet in a local coffee shop for about an hour or so and chat about your goals and aspirations as a new Sun Devil. Finally, as a Sky Leaders team member, you will be entitled to plenty of free food, drinks, and a pretty sweet t-shirt.

While all of this fun is going on, I will be examining the Sky Leaders program’s effectiveness by studying a variety of your collegiate experiences via surveys, interviews, observations, and focus groups. Given the interactive nature of the Sky Leaders program, your contributions cannot be kept completely confidential. Regardless, the results of my study will only be shared in the aggregate form via reports, presentations, or publications, but your name will not be used. I must also mention that your participation in the Sky Leaders program is voluntary. If you choose not to participate, there will be no penalty. Additionally, there are no

foreseeable risks or discomforts associated with your participation; however, you must be 18 years of age or older to participate within the program.

I realize that it may be difficult to grasp right now, but being selected as an inaugural member of the Sky Leaders program may turn out to be one of the most rewarding experiences of your entire college career. Therefore, I hope you will enthusiastically accept your spot on the Sky Leaders team today!

By completing and submitting the requested information below, you are agreeing to participate within the Sky Leaders program:

Printed Name: _____

Signature: _____ Date: _____

T-Shirt Size (please circle one): XXL XL L M S

Food allergies or other dietary preferences: _____

Best Email Address: _____

Best Phone Number: _____

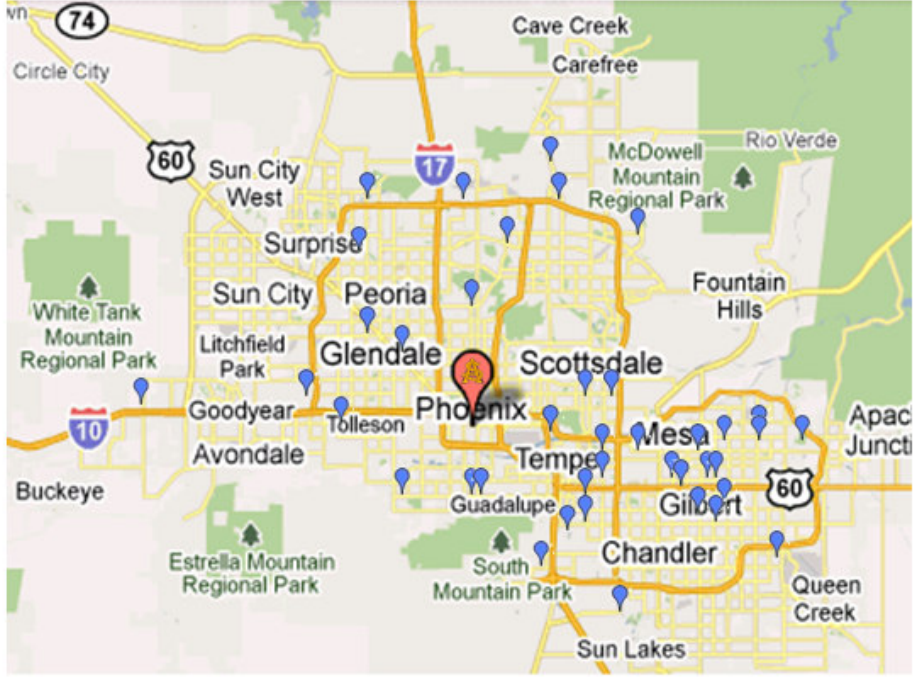
Thank you and go Devils!



Brent Sebold
Assistant Director
College of Nursing and Health Innovation
Arizona State University

APPENDIX O

MENTEE AND NON-MENTEE COMMUTING DISTANCE MAP



APPENDIX P

PEARSON CHI SQUARE STATISTICS – GENDER OF MENTEE
(TREATMENT) AND NON-MENTEE (CONTROL) PARTICIPANTS

Pearson Chi Square Statistics - Gender of Mentee (Treatment) and Non-mentee (Control) Participants

	Treatment	Control	Total
Female	30.80% (N=12)	53.80% (N=21)	84.60% (N=33)
Male	10.30% (N=4)	05.10% (N=2)	15.40% (N=6)
Total	41.00% (N=16)	59.00% (N=23)	100.00% (N=39)

Not statistically significant at the $p \leq 0.05$ level ($X^2 (1, N = 39) = 1.93, p = 0.17$)

APPENDIX Q

PEARSON CHI SQUARE STATISTICS – RACE OF MENTEE
(TREATMENT) AND NON-MENTEE (CONTROL) PARTICIPANTS

Pearson Chi Square Statistics - Race of Mentee (Treatment) and Non-mentee (Control) Participants

	Treatment	Control	Total
White	25.60% (N=10)	25.60% (N=10)	51.30% (N=20)
Hispanic/Latino	12.80% (N=5)	17.90% (N=7)	30.80% (N=12)
Multi-Race	00.00% (N=0)	05.10% (N=2)	05.10% (N=2)
Native American	00.00% (N=0)	05.10% (N=2)	05.10% (N=2)
African-American	00.00% (N=0)	02.60% (N=1)	02.60% (N=1)
Asian	02.60% (N=1)	00.00% (N=0)	02.60% (N=1)
No response	02.60% (N=1)	00.00% (N=0)	02.60% (N=1)
Total	41.00% (N=16)	59.00% (N=23)	100.00% (N=39)

Not statistically significant at the $p \leq 0.05$ level ($X^2 (6, N = 39) = 6.28, p = 0.40$)

APPENDIX R
PEARSON CHI SQUARE STATISTICS – PARENTAL EDUCATION STATUS
OF MENTEE (TREATMENT) AND NON-MENTEE (CONTROL)
PARTICIPANTS

Pearson Chi Square Statistics – Parental Education Status of Mentee (Treatment) and Non-mentee (Control) Participants

	Treatment	Control	Total
At Least One Parent Earned a Bachelor's Degree or Higher	30.80% (N=12)	20.50% (N=8)	51.30% (N=33)
Neither Parent Earned a Bachelor's Degree or Higher	10.30% (N=4)	38.50% (N=15)	48.70% (N=6)
Total	41.00% (N=16)	59.00% (N=23)	100.00% (N=39)

Not statistically significant at the $p \leq 0.05$ level ($X^2 (1, N = 39) = 6.11, p = 0.13$)

APPENDIX S

PEARSON CHI SQUARE STATISTICS – FINANCIAL CONCERN LEVEL OF
MENTEE (TREATMENT) AND NON-MENTEE (CONTROL)
PARTICIPANTS

Pearson Chi Square Statistics – Financial Concern Level of Mentee (Treatment) and Non-mentee (Control) Participants

	Treatment	Control	Total
Concerned About Financing Education	17.90% (N=7)	33.30% (N=13)	51.30% (N=20)
Not Concerned About Financing Education	23.10% (N=9)	25.60% (N=10)	48.70% (N=19)
Total	41.00% (N=16)	59.00% (N=23)	100.00% (N=39)

Not statistically significant at the $p \leq 0.05$ level ($X^2 (1, N = 39) = 0.62, p = 0.43$)

APPENDIX T

PEARSON CHI SQUARE STATISTICS – MENTEE (TREATMENT) AND
NON-MENTEE (CONTROL) PARTICIPANTS MEDIAN DISTANCE
TRAVELED TO CAMPUS

*Pearson Chi Square Statistics –Mentee (Treatment) and Non-mentee (Control)
Participants Median Distance Traveled to Campus*

	Treatment	Control
Median Distance (in Miles) Traveled to Campus	24 (N=16)	16 (N=23)

Not statistically significant at the $p \leq 0.05$ level ($X^2 (34, N = 39) = 36.93, p = 0.34$)

APPENDIX U

PEARSON CHI SQUARE STATISTICS – SELF-REPORTED HIGH SCHOOL
ACADEMIC PERFORMANCE LEVEL OF MENTEE (TREATMENT) AND
NON-MENTEE (CONTROL) PARTICIPANTS

Pearson Chi Square Statistics – Self-Reported High School Academic Performance Level of Mentee (Treatment) and Non-mentee (Control) Participants

	Treatment	Control	Total
Earned Straight A's	17.90% (N=7)	07.70% (N=3)	25.60% (N=10)
Earned Mostly A's and B's	17.90% (N=7)	35.90% (N=14)	53.80% (N=21)
Earned Mostly B's and C's	05.10% (N=2)	15.40% (N=6)	20.50% (N=8)
Total	41.00% (N=16)	59.00% (N=23)	100.00% (N=39)

Not statistically significant at the $p \leq 0.05$ level ($X^2 (2, N = 39) = 4.83, p = 0.09$)

APPENDIX V
PEARSON CHI SQUARE STATISTICS – INCOMING ABOR GPA OF
MENTEE (TREATMENT) AND NON-MENTEE (CONTROL)
PARTICIPANTS

Pearson Chi Square Statistics – Incoming ABOR GPA of Mentee (Treatment) and Non-mentee (Control) Participants

	Treatment	Control
Mean GPA	3.37 (N=16)	3.15 (N=23)

Not statistically significant at the $p \leq 0.05$ level ($X^2 (33, N = 39) = 34.87, p = 0.38$)

APPENDIX W

PEARSON CHI SQUARE STATISTICS – COMPARISON OF FALL 2010

ASU GPA BETWEEN MENTEE (TREATMENT) AND

NON-MENTEE (CONTROL) PARTICIPANTS

Pearson Chi Square Statistics – Comparison of fall 2010 ASU GPA between Mentee (Treatment) and Non-mentee (Control) Participants

	Treatment	Control
Mean GPA	2.93 (N=16)	2.91 (N=23)

Not statistically significant at the $p \leq 0.05$ level ($X^2 (33, N = 39) = 36.25, p = 0.32$)

APPENDIX X

POST-SURVEY ISSUED TO TREATMENT GROUP PARTICIPANTS

Code Number (your 10-digit ASU ID #):

Please indicate your Arizona five-digit zip code and the major cross streets nearest to your current residence (for example, 85281; Scottsdale Rd. and McDowell Rd.):

Section 1

- (1) It is important to me to graduate from ASU within 3-5 years:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (2) I intend to graduate with a degree in the major in which I am currently enrolled:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (3) I am satisfied with my decision to attend ASU:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (4) I will learn as much as I can about my major-related field while I'm at ASU:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (5) I feel that my major is the right choice for me:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (6) I do not plan on transferring to another college or university at some point:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (7) I am committed to earning a Bachelor's degree at ASU no matter what it takes:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- (8) I feel ASU is a good fit for me personally:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree

Section 2

Note: the following section will ask you about “activities that are related to your major.” These activities might include participation in student clubs and organizations (for example, the Student Nutrition Council), service learning experiences (for example, volunteering at a local blood bank), undergraduate research experiences (for example, participating in a faculty member’s fitness research study), and internships (for example, paid or unpaid work experience in a local health clinic). “Activities that are related to your major” do not include activities that are not related to what you learn in the classroom, such as attending sporting or cultural events, rushing a social fraternity or sorority, or participating in student government, social programming, or intramural sports.

- (1) It is important for to me to get involved with activities that are related to my major:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- (2) I intend to get involved with activities that are related to my major at ASU:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree

- (3) I am satisfied with opportunities available to me at ASU to get involved with activities that are related my major:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- (4) I will obtain more information about activities available to me at ASU that are related my major:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- (5) I will become involved with activities that are related my major outside of class:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- (6) It is important for me to learn how to become involved with (or obtain more information about) activities available to me at ASU that are related my major:
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree

Section 2.1

(1) If applicable, please tell me about the activities that you've become involved with that are related to your major. These activities might include participation in student clubs and organizations (for example, the Student Nutrition Council), service learning experiences (for example, volunteering at a local blood bank), undergraduate research experiences (for example, participating in a faculty member's fitness research study), and internships (for example, paid or unpaid work experience in a local health clinic):

(2) If applicable, why did you become involved in the aforementioned activities?

(3) Are you involved with any other mentorship experiences at ASU (for example, the Obama scholarship mentoring program)? If applicable, please explain how this (or these) mentorship programs have impacted your experience at ASU thus far:

Section 2.2

(1) Have you become involved with a student club or organization related to your major (e.g., the Student Nutrition Council)? Circle one: Yes / No

If yes, please rate your level of satisfaction with this experience. Circle one:

Very satisfied Satisfied Indifferent Unsatisfied Very unsatisfied

(2) Have you become involved with a service learning experience related to your major (e.g., the volunteering at a local blood bank)? Circle one: Yes / No

If yes, please rate your level of satisfaction with this experience. Circle one:

Very satisfied Satisfied Indifferent Unsatisfied Very unsatisfied

(3) Have you become involved with an undergraduate research experience related to your major (e.g., a faculty member's fitness research study)? Circle one: Yes / No

If yes, please rate your level of satisfaction with this experience. Circle one:

Very satisfied Satisfied Indifferent Unsatisfied Very unsatisfied

(4) Have you become involved with an internship related to your major (e.g., work experience in a local health clinic)? Circle one: Yes / No

If yes, please rate your level of satisfaction with this experience. Circle one:

Very satisfied Satisfied Indifferent Unsatisfied Very unsatisfied

Section 3.1

(1) It is important for me to feel accepted and supported by my professors at ASU:

- a. Strongly Agree
- b. Agree
- c. Disagree
- d. Strongly Disagree

- (2) Thus far, I am satisfied with the level of acceptance and support that I receive from my professors at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (3) I intend to feel genuinely accepted and supported by my professors this semester at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (4) I aim to become academically accepted and supported by a wide variety of my professors while I'm at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (5) I intend to increase my academic confidence while I'm at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (6) I feel comfortable approaching my professors both inside and outside of the classroom:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

Section 3.2

- (1) It is important for me to feel accepted and supported by my peers at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (2) I am satisfied with the level of acceptance and support that I receive from my peers at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (3) I intend to feel genuinely accepted and supported by my peers at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (4) I will try to become socially accepted and supported by a wide variety of my peers while I'm at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (5) I intend to increase my social confidence while I'm at ASU:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- (6) I feel comfortable approaching my peers both inside and outside of the classroom:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

Section 4

- (1) It is important for me to re-enroll in classes next semester:
- a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (2) I intend to re-enroll in classes at ASU until I ultimately graduate:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (3) I feel financially comfortable enough to remain in classes this semester and enroll in next semester's classes:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (4) I feel culturally comfortable enough to remain in classes this semester and enroll in next semester's classes:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (5) I feel academically comfortable enough to remain in classes this semester and enroll in next semester's classes:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

- (6) I feel socially comfortable enough to remain in classes this semester and enroll in next semester's classes:
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree

Program-specific open-ended questions (only included on the treatment group's post-surveys).

- (1) Please tell me what you liked about participating in the Sky Leaders program:

- (2) Please tell me what you didn't like about participating in the Sky Leaders program:

- (3) What are your over-all feelings about the Sky Leaders program:
Thank you!

APPENDIX Y

POST-SURVEY ISSUED TO CONTROL GROUP PARTICIPANTS

The post-survey issued to the non-mentees (control group) was identical to the post-survey issued to the mentees (treatment group) (see Appendix X), save three final open-ended questions, which were specific to the intervention.

APPENDIX Z

MENTOR PARTICIPANT INTERVIEW INSTRUMENT

- (1) Please tell me what you liked, if anything, about participating in the Sky Leaders program:
- (2) Please tell me what you didn't like, if anything, about participating in the Sky Leaders program:
- (3) Please tell me if you would like to change anything about the Sky Leaders program:
- (4) Describe your relationship with your mentees:
- (5) Do you think the Sky Leaders program should be sustained; if so, how?
- (6) Do you feel the *Sky Leaders Mentor Training Retreat* helped to achieve the program's overarching goal of increasing first-year student involvement and re-enrollment rates; if so, how?
- (7) Do you feel the faculty and peer leader-hosted Sky Leaders meetings are helping to increase first-year student involvement and subsequent re-enrollment rates; if so, how?
- (8) Have you used any campus-wide collaboration strategies to promote co-curricular engagement opportunities? If so, do you think these efforts have helped to increase first-year student involvement and re-enrollment rates; if so, how?
- (9) Please share the code number(s) of the mentee(s) whom you might recommend I speak with about their positive/negative experiences within the program:

APPENDIX AA

MENTEE PARTICIPANT INTERVIEW INSTRUMENT

- (1) What is your code number (10 digit ASU ID #)?
- (2) Please tell me what you liked, if anything, about participating in the Sky Leaders program:
- (3) Please tell me what you didn't like, if anything, about participating in the Sky Leaders program:
- (4) How would you describe your over-all feelings about participating within the Sky Leaders program?
- (5) How would you describe your level of commitment to re-enrolling in classes and ultimately graduating from ASU?
- (6) How would you describe your level of commitment to your current major? Why?
- (7) Are you interested in any activities related to your major, aside from going to class? If so, what types of activities and why?
- (8) How would you describe your interactions with your professors outside of class, if any?
- (9) How would you describe your interactions with your peers outside of class, if any?
- (10) Has your participation within the Sky Leaders impacted your decision to get involved or not get involved with any activities related to your major? Why?
- (11) Would you consider becoming a mentor to future students?

APPENDIX AB

SKY LEADERS TEAM MEETING OBSERVATION INSTRUMENT

Observation #:
Date:
Location:
Start and Stop Time:
Setting:
Participant Code Numbers:
Researcher Role:

Descriptive Notes <i>Detailed, chronological notes about what I see, hear, etc.</i>	Reflective Notes <i>Concurrent notes about my personal reactions, experiences, etc.</i>

APPENDIX AC

INVITATION TO ATTEND THE FINAL FALL FIESTA ASSEMBLY

Email sent November 7, 2011

Hi Sky Leaders,

We look forward to seeing ALL of you for our last FREE LUNCH of the semester! The mentors and I have really enjoyed getting to know each of you over the past twelve weeks and the Final Fall Fiesta will be one last opportunity for all of us to get together and have some fun.

Here are the details:

Sky Leaders Final Fall Fiesta

Who: All of the 2010 Sky Leaders mentors and mentees

What: A FREE catered Mexican lunch and a recognition ceremony.

When: 12:00 noon until approximately 1:00 pm; this coming Thursday, November 11th (**Veteran's Day—No School**)

Where: Macayo's Depot Cantina (300 S. Ash Ave., Tempe, AZ 85281 - ½ block from the light rail stop @ Mill Ave. & 3rd St.)

What to Wear: Please wear your blue Sky Leaders t-shirts and be ready for a group photo!

RSVP: Please email brent.sebold@asu.edu ASAP to let me know if you'll be coming.

Thanks and I look forward to seeing you all again soon,

Brent

APPENDIX AD
MENTOR FOCUS GROUP INSTRUMENT

<p>Moderator introduction, thank you and purpose (1 minute)</p>	<p>Hello again everyone. I'd like to start off by thanking each of you for taking time to come today. We'll be conducting the focus group for about a half hour and then we'll have some fun with the mentees during the Final Fall Fiesta.</p> <p>I have called this meeting to share some of the themes that I have constructed as a result of the Sky Leaders team meetings that we have conducted with our assigned mentees over the past eleven weeks. As such, I'd like to ask that you share your personal thoughts about each of these themes as I bring them up.</p> <p>I'm going to lead our discussion today. I am not here to convince you of anything or try to sway your opinion. My job is just to share information, ask you questions, and then encourage and moderate our discussion.</p>
<p>Ground Rules (2 minutes)</p>	<p>To allow our conversation to flow more freely, I'd like to go over some ground rules.</p> <ol style="list-style-type: none"> 1. Please talk one at a time and avoid side conversations. 2. Everyone doesn't have to answer every single question, but I'd like to hear from each of you today as the discussion progresses. 3. This will be an open discussion—feel free to comment on each other's remarks. 4. There are no "wrong answers," just different opinions. Say what is true for you, even if you're the only one who feels that way. Don't let the group sway you. But if you do change your mind, just let me know. 5. If you need to take a bathroom break at any time, please feel free.
<p>Introduction of participants (10 minutes)</p>	<p>Before we start talking about the Sky Leaders program, I'd like to make sure that everyone here knows each other. Let's go around the room and share your major or teaching area.</p>
<p>Member check (20 minutes)</p>	<p>Share some of the themes that I have constructed as a result of the Sky Leaders team meetings. [Themes were introduced] Ask for personal thoughts about each of these themes.</p>
<p>Closing question (10 minutes)</p>	<p>What are the three most important things that you have realized as mentors within the Sky Leaders program?</p>
<p>Closing (2 minutes)</p>	<p>Thanks for coming today and talking about your experiences. Your comments have provided tremendous insight. Thank you so much for your time.</p>

APPENDIX AE

MENTEE FOCUS GROUP INSTRUMENT

<p>Moderator introduction, thank you and purpose (1 minute)</p>	<p>Hello again everyone. I'd like to start off by thanking each of you for taking time to come today. We'll be here for about an hour more and then you're free to head out.</p> <p>I have called this meeting to share some of the themes that I have constructed as a result of the Sky Leaders team meetings that we have conducted with our assigned mentors over the past eleven weeks. As such, I'd like to ask that you share your personal thoughts about each of these themes as I bring them up.</p> <p>I'm going to lead our discussion today. I am not here to convince you of anything or try to sway your opinion. My job is just to share information, ask you questions, and then encourage and moderate our discussion.</p>
<p>Ground Rules (2 minutes)</p>	<p>To allow our conversation to flow more freely, I'd like to go over some ground rules.</p> <ol style="list-style-type: none"> 1. Please talk one at a time and avoid side conversations. 2. Everyone doesn't have to answer every single question, but I'd like to hear from each of you today as the discussion progresses. 3. This will be an open discussion—feel free to comment on each other's remarks. 4. There are no "wrong answers," just different opinions. Say what is true for you, even if you're the only one who feels that way. Don't let the group sway you. But if you do change your mind, just let me know. 5. If you need to take a bathroom break at any time, please feel free.
<p>Introduction of participants (10 minutes)</p>	<p>Before we start talking about the Sky Leaders program, I'd like to make sure that everyone here knows each other. Let's go around the room and share your major.</p>
<p>Member check (20 minutes)</p>	<p>Share some of the themes that I have constructed as a result of the Sky Leaders team meetings. [Themes were introduced] Ask for personal thoughts about each of these themes.</p>
<p>Closing question (10 minutes)</p>	<p>What are the three most important things that you have realized as mentees within the Sky Leaders program?</p>
<p>Closing (2 minutes)</p>	<p>Thanks for coming today and talking about your experiences. Your comments have provided tremendous insight. Thank you so much for your time.</p>

APPENDIX AF

PEARSON CHI SQUARE STATISTICS – COMPARISON OF
MENTEE (TREATMENT) AND NON-MENTEE (CONTROL)
PARTICIPANTS' SPRING 2011 RE-ENROLLMENT DATA

Pearson Chi Square Statistics – Comparison of Mentee (Treatment) and Non-mentee (Control) Participants’ Spring 2011 Re-Enrollment Data

	Treatment (N=16)	Control (N=23)
Re-Enrolled	88% (N=14)	91% (N=21)

Not statistically significant at the $p \leq 0.05$ level ($X^2 (1, N = 39) = 0.15, p = 0.70$)

APPENDIX AG

MENTEE (TREATMENT) PARTICIPANT GROUP

PRE- AND POST-SURVEY RESPONSE DIFFERENCES BY ITEM

Mentee (Treatment) Participant Group Response Differences by Item in Descending Order

Strongly Agree=4, Agree=3, Disagree=2, Strongly Disagree=1			
Q#	Question	Mean Diff	SD
32	It is important for me to feel accepted and supported by my peers at ASU	0.19	0.91
6	I do NOT plan on transferring to another college or university at some point	0.08	1.03
34	I intend to feel genuinely accepted and supported by my peers at ASU	0.05	0.79
36	I intend to increase my social confidence while I'm at ASU	0.04	0.85
38	It is important for me to re-enroll in classes next semester	0.01	1.00
10	I intend to get involved with activities that are related to my major at ASU	-0.02	0.86
13	I will become involved with activities that are related my major outside of class	-0.02	0.79
39	I intend to re-enroll in classes at ASU until I ultimately graduate	-0.05	1.20
33	I am satisfied with the level of acceptance and support that I receive from my peers at ASU	-0.07	0.30
35	I will try to become socially accepted and supported by a wide variety of my peers while I'm at ASU	-0.08	0.81
9	It is important for to me to get involved with activities that are related to my major	-0.08	0.63
3	I am satisfied with my decision to attend ASU	-0.08	0.92
11	I am satisfied with opportunities available to me at ASU to get involved with activities that are related my major	-0.08	0.97
14	It is important for me to learn how to become involved with (or obtain more information about) activities available to me at ASU that are related my major	-0.09	0.76
37	I feel comfortable approaching my	-0.14	0.67

	peers both inside and outside of the classroom		
8	I feel ASU is a good fit for me personally	-0.19	0.86
31	I feel comfortable approaching my professors both inside and outside of the classroom	-0.21	0.88
7	I am committed to earning a Bachelor's degree at ASU no matter what it takes	-0.21	1.08
43	I feel socially comfortable enough to remain in classes this semester and enroll in next semester's classes	-0.23	0.68
41	I feel culturally comfortable enough to remain in classes this semester and enroll in next semester's classes	-0.23	0.86
40	I feel financially comfortable enough to remain in classes this semester and enroll in next semester's classes	-0.26	0.96
26	It is important for me to feel accepted and supported by my professors at ASU	-0.28	0.76
12	I will obtain more information about activities available to me at ASU that are related my major	-0.33	0.74
27	Thus far, I am satisfied with the level of acceptance and support that I receive from my professors at ASU	-0.33	0.76
42	I feel academically comfortable enough to remain in classes this semester and enroll in next semester's classes	-0.35	0.87
30	I intend to increase my academic confidence while I'm at ASU	-0.36	0.83
1	It is important to me to graduate from ASU within 3-5 years	-0.36	1.11
28	I intend to feel genuinely accepted and supported by my professors this semester at ASU	-0.40	0.86
2	I intend to graduate with a degree in the major in which I am currently enrolled	-0.51	0.93
4	I will learn as much as I can about my major-related field while I'm at ASU	-0.53	0.95

29	I aim to become academically accepted and supported by a wide variety of my professors while I'm at ASU	-0.60	0.72
5	I feel that my major is the right choice for me	-0.60	0.88

Note: N = 16

APPENDIX AH
ENGAGEMENT SATISFACTION LEVELS OF MENTEE (TREATMENT)
AND NON-MENTEE (CONTROL) PARTICIPANTS

Descriptive Statistics – Engagement Satisfaction Levels of Mentee (Treatment) and Non-mentee (Control) Participants

Activity	<u>Mean Satisfaction</u> ^a		p	d
	Treatment (N=16)	Control (N=23)		
Student Club or Organization	4.33	4.00	0.51	0.22
Service Learning	4.50	4.40	0.81	0.08
Undergraduate Research	4.00	b	c	c
Internship	4.50	4.67	0.71	0.12

^a 5=Very Satisfied, 4=Satisfied, 3=Indifferent, 2=Unsatisfied, 1=Very Unsatisfied

^b Unable to calculate due to N=0.

^c Unable to compute measures of association.

APPENDIX AI
IRB APPROVAL

To: Audrey Beardsley
FAB

From: *fr* Mark Roosa, Chair
ad Soc Beh IRB

Date: 06/22/2010

Committee Action: Exemption Granted

IRB Action Date: 06/22/2010

IRB Protocol #: 1006005204

Study Title: Leveraging Faculty and Peer Leaders to Promote Commuter Student Co-Curricular Engagement: A Collegiate Retention Intervention Study

The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(1).

This part of the federal regulations requires that the information be recorded by investigators in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. It is necessary that the information obtained not be such that if disclosed outside the research, it could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

You should retain a copy of this letter for your records.